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PHONOLOGY OF THE VOLHYNIAN GERMAN DIALECT

OF THE EDMONTON AREA

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by

JOHN ARBUCKLE
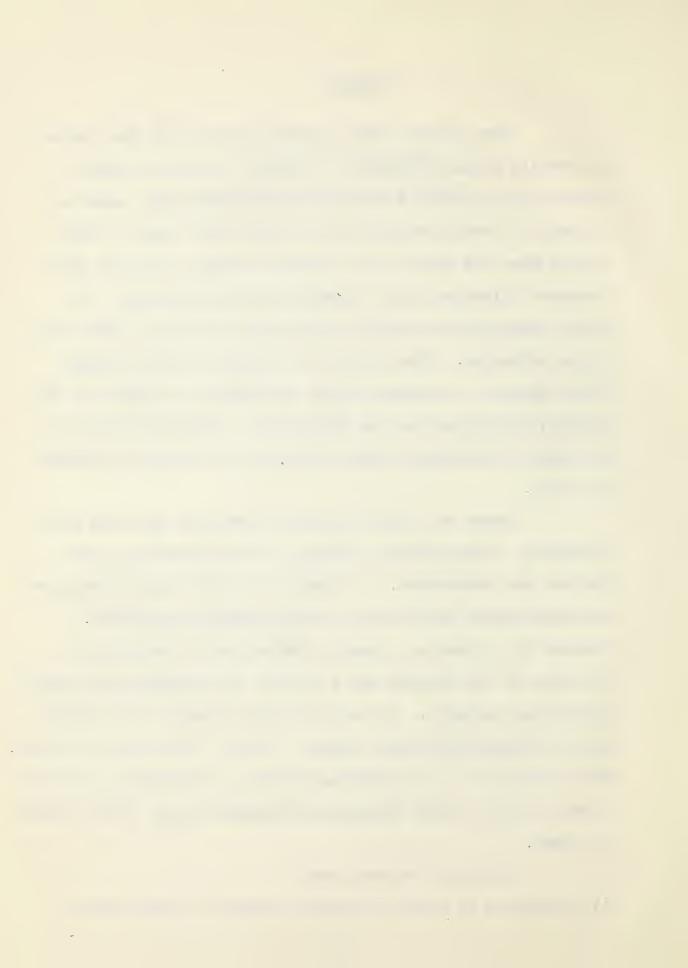
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ABSTRACT

The present study concerns itself with the dialect of certain German-Canadians, formerly colonists in that territory now partly Polish and partly Ukrainian, known as Volhynia. German colonies in this area date back to 1820, a time when the Czars still welcomed German colonists from Congress Poland on their underdeveloped territories. By 1870, Russo-German hostility made the position of these colonists untenable. They started to emigrate mainly towards North America, a movement which increased as a result of the Russian Revolution and two World Wars. Conditions for the survival of Volhynian German language and culture in Canada are poor.

Based on a high frequency word-list and free conversation, a descriptive analysis of the phonology of the dialect was undertaken. In Chapter II, the various practical and theoretical difficulties encountered are discussed. Chapter III presents a general discussion of the phonetic features of the dialect and a list of its phonemes with their allophonic variants. In the concluding chapter, the results of the investigation are stated. Briefly, they are as follows. The existence of a well-defined dialect is adequately substantiated for the former Volhynian colonists living in the Edmonton area.

Its main features are:

1) unrounding of vowels generally rounded in High German,

e.g. Füsse 'feet': the equivalent in Volhynian has a vowel
similar to the stressed vowel in schiessen although it is
more "centralized";

2) loss, due to unrounding, of the High German diphthong
that appears in Gebäude, which would rhyme with beide in
Volhynian;

3) the velar voiced fricative in place of the velar voiced
stop in High German.

It is argued that unrounding is due mainly to the
habitually spread lip position, photographs of which can be
seen in Appendix D.

Since this dialect is unlikely to survive much
longer in Canada, tape recordings have been made, and the
phonemic transcription of an anecdote, the "Bear Story," is
included in the thesis as Appendix C.

It is suggested, lastly, that the study of the
dialect be extended to include an examination of its morpho-
logy and syntax.

PREFACE

The purpose of the present investigation is to initiate the study of that dialect which was spoken by the German colonists of Volhynia, one of the ancient principalities of the Ukraine.[1] They were citizens of Russia, from the establishment of the colony about 1820, till the restoration of Poland in 1919, which drew the Russo-Polish border through the middle of Volhynia, thus splitting the German colonies into separate groups, with separate citizenship. The Russo-German hostility which started towards the end of the nineteenth century, was the beginning of their troubles, and this was when they began to emigrate to Canada. The 1914-1918 War, the Bolshevik Revolution and the 1939-1945 War completed their destruction. Those who are now settled in the Edmonton area contribute to the culture of the mixed German colony of Edmonton, but cannot be considered as a separate, self-contained group. Moreover, in this new environment, the younger generation is fast losing command of the language of their parents. This applies to the whole German community, and in the process, city life, public schools and the prestige of English all play a part.
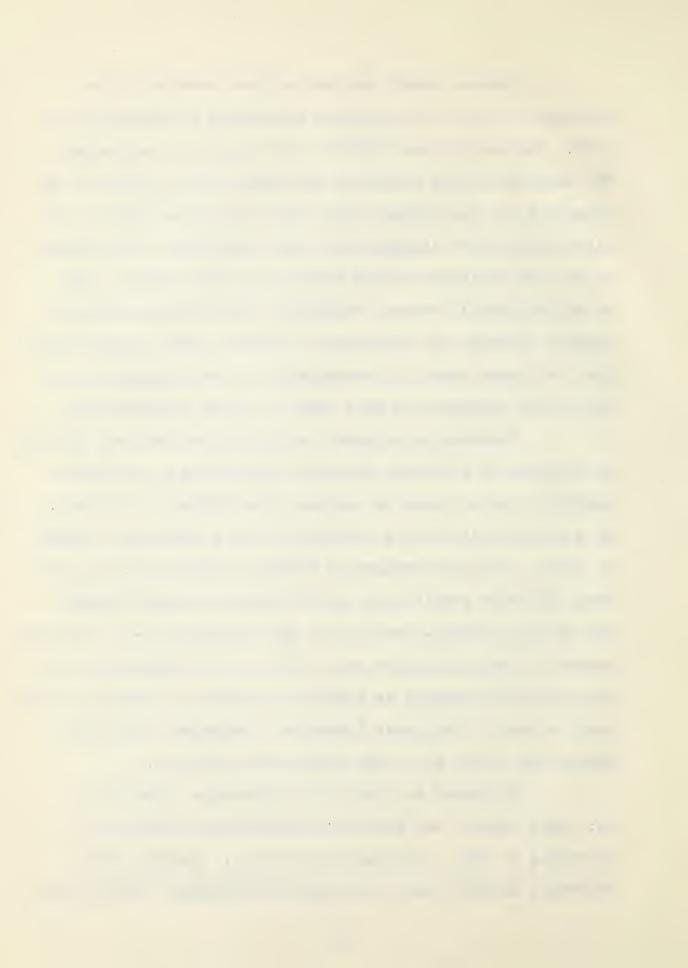
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[1]For an early map see Moses Pitt, _Description of Poland_ (Oxford, 1680 reprod. 1943), p.24.

Dialect study received a great boost with the principle of self-determination propounded at Versailles in 1919. Nationality was equated with linguistic background. The dangers of this principle are being felt in India at the present time, and threaten the very life of the state. Sentimentality about language may breed fanaticism. Be that as it may, we no longer regard dialects as mere deviant forms of an arbitrarily chosen "standard," but as being worthy of respect (without any overtones of romantic awe), because they are the chosen means of communication of many speakers, who have lived together for many years in close companionship.

Moreover, a colonial territory that has been settled by speakers of different dialects constitutes a new speech-community, which tends to produce a new dialect of its own. If a colonial dialect is elaborated over a sufficient number of years, early differences as between speakers will be worn down, and what results will be an entity--a closed system. The thorough study--phonological and grammatical--of a dialect spoken in some out-of-the way corner, is as rewarding to the linguist when regarded as something complete in itself, as the study of one of the great "standard" languages, which are themselves, after all, only fashionable dialects.

My thanks are due to my informants, especially Mr. Ewald Ruppel, who spent many weary hours dictating, or recording on tape, material for my study. Besides being extremely helpful, they all showed considerable understanding

of my interest in their language. Perhaps this is because
they have all undergone the experience of having to learn
a second, and sometimes a third or even a fourth language.
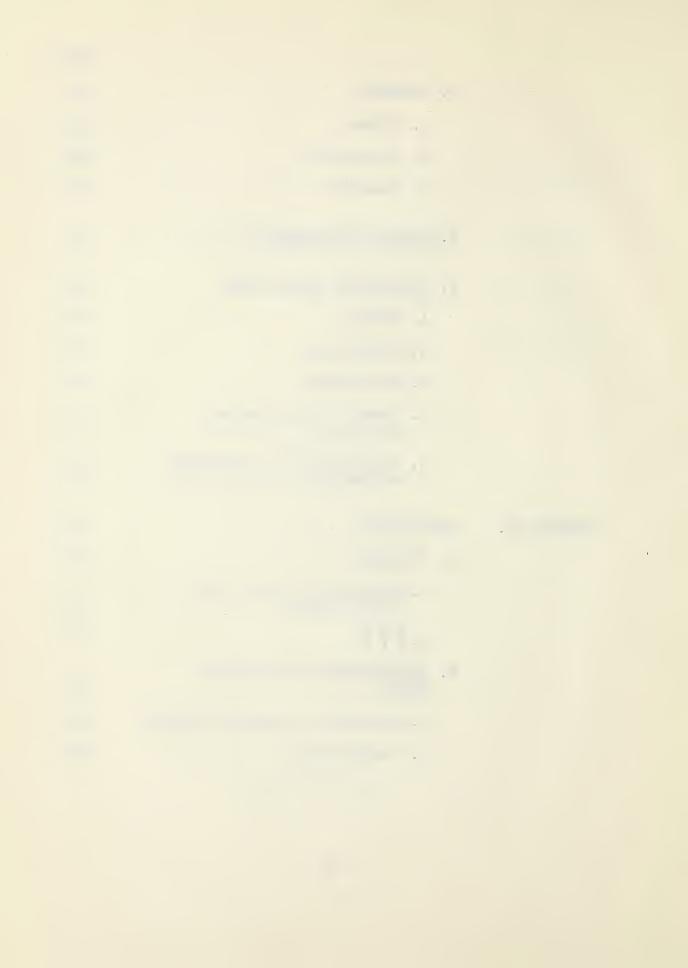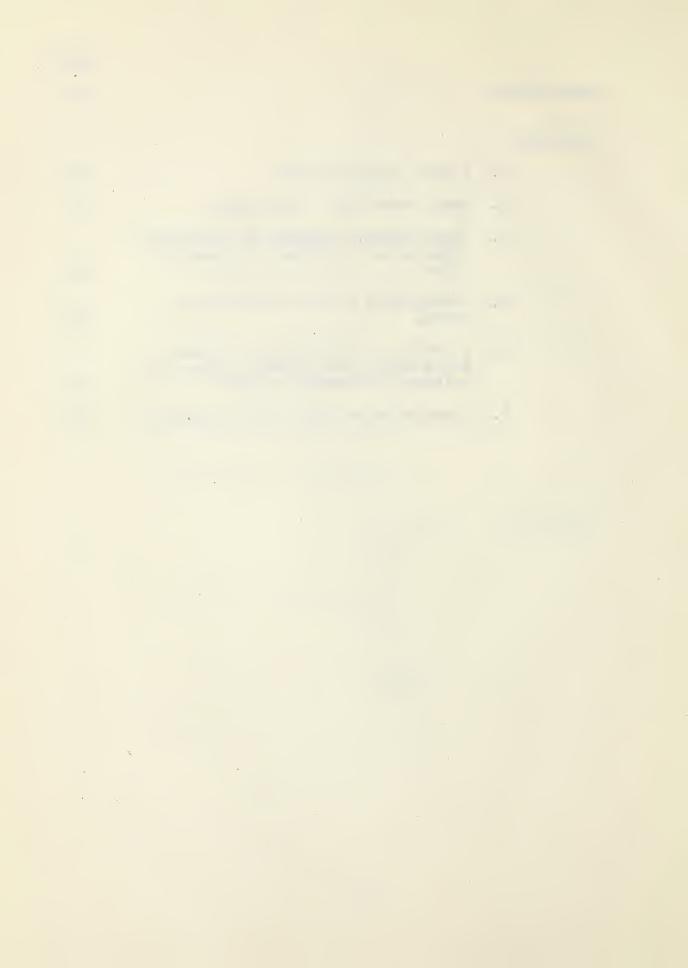They know the subtleties of language differences.

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CHAPTER I

THE HISTORICAL BACKGROUND OF THE VOLHYNIAN GERMANS

If we associate the word German with what has appeared on our school atlas since 1919 as Germany, it might have surprised us to discover, between the two world wars, a colony of Germans existing in Volhynia on both sides of the Polish-Ukrainian border.

Just as in the New World there has been a tendency to "go West," so in Europe there has been a movement towards the East. Europe has had its frontiers as well as America; and the lead in settling the frontier was often given by monasteries founded by German monks.[1]

Much could be said of the role of the German Ritterorden, at times welcomed by the Poles as a means of support for the thrust eastwards of "Roman" Christiantiy, and at other times dreaded by their former hosts for their overweening political influence. Their cultural impact was tremendous.

It is evident, from a short study of Polish his-

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[1]K. Karasek-Lück, Die deutschen Siedlungen in Wolhynien (Leipzig, 1931), p.40.
See also Henri Pirenne, Medieval Cities (Princeton, 1948), p.81.

tory,[2] that much of what we call "Western Civilization"
was transmitted to the Eastern nations through German in-
fluence, in the same way as the Normans were the relayers
of Latin culture in England. In particular, the rise of
urban civilization is associated with the settlement in
Poland of German artisans and merchants in the Middle Ages.
Towns were founded, and charters granted, according to
German laws.

A more thorough examination of these developments
would no doubt make clear why Germans have found the soil
of Poland not too strange to put down roots in. At least
this is true of pre-Reformation times, when they had a
common religion; but it would not explain how Lutheran and
Evangelical colonies appeared in Poland and the Ukraine.

In times of exceptional agricultural backwardness,
for instance after the Tartar invasions of the thirteenth
century, the Eastern landowner had often occasion to search
for more vigorous hands than the landless and therefore
uninterested serf could provide. This need was filled by
staunch German peasants bitten by the proverbial "Wander-
lust"! Moreover, there were certain tasks that needed
skills that only generations of experience could provide.

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[2]O. Halecki, _A History of Poland_ (London, 1955).

The work of converting fen and marsh into farm-land was
done by the "Holländer"--Mennonites who enjoyed the privi-
leges of pioneers in a land which needed their engineering
skill and physical energy, in return for freedom of worship
and freedom from all feudal duties.[3] They were the pioneers
of German colonization in Volhynia.

In spite of what has been said by Germans and
others about the "Drang nach Osten,"[4] there never has been
any possibility of extending the national frontier into the
Slav territory by means of massive movement of people. There
have only been scattered settlements, and always these have
been in danger of being absorbed into the environment.

The Poles had made it their policy to romanize
the Orthodox inhabitants of Rus (Ukraine); they had spent
hundreds of years and many campaigns in the attempt with
only partial success! The much despised Greek-Orthodox
peasant probably did not see himself as the inheritor of
Byzantine civilization, but he was stubbornly faithful to
his traditions. If neither the Teutonic Knights nor the
Poles had been able to break this faith, how could the

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[3]See the vivid description of dark impenetrable forest,
swamp, and clearings overgrown with thistles given by
a Pole at the end of the 18th century in Karasek-Lück,
p. 20.

[4]Hugh Seton-Watson, Eastern Europe between the Wars
(Cambridge, 1945), p. 49.

Germans in the eighteenth century?

Moreover, by the nineteenth century, the Czars of Russia were becoming more and more the champions of the Orthodox in the Ukraine against the encroachments of Western influence. The German colonists rather felt themselves as guests of a rather moody host with whom they had to be on their best behaviour. One of the informants tells how his father used to take him to school on his back through the deep snow--to learn Russian--because they were guests in a strange land and must be as accommodating as possible.

The German colony in Volhynia was pioneered after 1818 by Mennonites, and settled by Augsburg-Protestant colonists from Kongresspolen.[5] All they could look forward to was the life of back-breaking toil which is the lot of those who must try to extract from the land the wherewithal to pay for it. And it is worse if the land has first to be cleared. Arnold Toynbee characterizes the Western man as a tree-cutter. The German colonist in Volhynia was still plying the same trade at the end of the nineteenth century. Our early pioneers, especially those in the timbered areas of Canada when no machinery was available, must have known the same trials, but yet they won through, and like their neighbours

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[5]Lutz Mackensen, "Heimat, Kolonie, Umvolk," Folk, I (January 1937), 25.

to the South, produced something rich and new.

The same was not to happen in Volhynia. The des-
cendants of the Czars who had welcomed the first colonists,
began to adopt restrictive measures around 1870, showing a
political hostility to the colonists which led them to
emigrate in large numbers to North America.[6] This is no
doubt the origin of the movement to Canada which has con-
tinued since that time.

1914 ... needless to say, a catastrophe for the
Germans in Russia! In 1917 the Bolsheviks could not look
kindly on foreigners who, by their standards, were rich
and who employed locals as hired help. If only to please
the Ukrainians, to whom they promised satisfaction for their
natural aspirations, they taxed the Germans out of house and
home.

Some few returning in the early twenties from
Siberia or from wherever the storms of war had driven them,
started again at the bottom. But the prospect did not seem
very bright, as can be seen from official census statistics
gathered by the Polish government in 1921. These show clearly
that the colony was in a very grave cultural situation. Only
14.3% of "Evangelicals," i.e. Germans, had attended "Volks-
schule." The danger lay in the rising illiteracy among the

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[6]Karasek-Lück, p. 30.

younger generation: 67.8% among ten to fourteen year-olds,
compared to 43.3% among thirty to thirty-nine year-olds.
There had been an improvement around the turn of the century,
which was brought to an end by the war.[7] Could the Volhynian
Germans rise above their material difficulties and place
their colonies on a solid foundation, wedged as they were
between the socialism of the Russians and the nationalism
of the Poles? Apparently Walter Kuhn, about 1931, already
saw signs of impending doom, for he wrote then a warning
that tremendous efforts must be made if the Volhynian Ger-
mans, his compatriots, were not to lose their identity.[8]

        At the present time, it is impossible to find out
exactly what happened to the Volhynian Germans during the
Second World War. After the new partition of Poland, devised
by Germany and Russia, their line of communication with the
homeland crossed only one frontier instead of two. Volhynia
was now wholly within Russia. The men served in the Russian
army and later were called to fight against the forces of
Hitler invading from the West. The contact of the two armies
gave the opportunity that many were seeking to slip across
no-man's-land in the middle of the night and take their

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[7] From _Statistique de Pologne_, Wolhynien: Tables 6 and 7,
    quoted in Karasek-Lück pp.36 and 40.

[8] Quoted in Karasek-Lück, p.41.

chances with the sentries on the German side. Apart from one reference to Volhynia in Volume I of the <u>Documents on the Expulsion of the Germans from Eastern-Central Europe,</u> the fate of the Volhynian colonies since the end of the fighting is unknown.[9]

As a result of the illiteracy figures given above, it is not surprising that English has taken the place of German as the language of civilization amongst the Volhynian Germans settled in Canada. Even amongst the older generation, it is used predominantly outside the home; and in the succeeding generation, it is replacing German altogether.

One sample is available on tape of the mixture of German and English which comes about after only one generation. What surprises one most, however, is that, in spite of the large number of English terms introduced--mostly technical, since the speaker is an engineer in the oil business--the structure of the dialect of the parents remains generally intact. One feels however that a great effort is being made to adapt a way of speaking that was used in childhood and is still used in the home, for conveying information

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[9]Bonn, 195?, p. 5.

about things and events which take place in an English-speaking world.[10] This seems to be a natural process, but it is surprising that the colony existed for so long in Poland or Russia, many colonists becoming bilingual, without losing its native speech or the consciousness of its German origin. This question has been treated satisfactorily by Lutz Mackensen in the article cited, who lists seven crucial factors which make for the maintenance, or the loss, of the cultural inheritance of a colony.

These criteria can be listed as follows:

Factor making for conservatism	Factor making for innovation
Daughter colony	Mother colony
Cultural superiority	Cultural inferiority
Difference of faith	Identity of faith
Literary language possessed	Literary language to be borrowed from hosts
Closed communities	Scattered communities
Open communication with homeland	Isolation from centres of home culture
Adverse political pressure from hosts	Liberal and tolerant attitude of hosts

When we consider these factors, in connection with the Volhynian Germans, in Volhynia and in Canada, we find

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[10]For a complete discussion of language mixing, see Uriel Weinreich, _Languages in Contact_ (New York), 1953.

the following picture. The Germans in Volhynia had emig-
rated from Congress Poland, the mother colony. They were
therefore experienced in withstanding cultural pressure
from without. This criterion does not apply to Canada at
all. The Germans were the cultural innovators in the
Ukraine; two items in support of this are the introduction
of potatoes and wells. In Canada they have no cultural
superiority. Lutherans and Evangelicals in Volhynia were
Germans; Greek Orthodox were Ukrainians, and the former
despised the latter. Here in Canada the Germans are, for
the most part, Protestants among Protestants. In Volhynia
they lived in closed communities grouped around the "Kirch-
spiel"; here they are scattered in and around the city. In
both Volhynia and Canada, they are isolated from their home-
land and out of reach of its cultural radiation. Lastly,
since the Russo-German hostility, which began at the end of
the last century, the colonists were under considerable
pressure; in Canada, on the other hand, they are rather en-
couraged to maintain their language and traditions. Where
there is nothing to resist, the will to resist dies.

Comparing, then, Volhynia with Canada as a suit-
able climate for the maintenance of the colonial-German
cultural inheritance; if we count up, for each country, the
factors yielding positive results, we will find that
Volhynia makes a score of five out of seven and Canada,

zero.[11]

The above investigation was undertaken in an
attempt to find out to what general dialect area the Volhy-
nian German colonies were likely to belong. Their history,
and that of their mother colonies in Poland, provides clear
evidence that they belong to the ostmitteldeutsche dialect
region.[12]

Lastly, it was found that English has great pres-
tige amongst the Canadian-born descendants of the Volhynian
settlers in Canada, that English has an adverse effect on
their German speech, and that therefore the younger genera-
tion would be unreliable as informants.

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[11]See Appendix F for a tabular comparison of the two
countries as suitable environments for the maintenance
of cultural inheritance.

[12]For the history and description of the ostmitteldeutsche
dialect region as a German colonial territory, see Adolf
Bach, Geschichte der deutschen Sprache (Heidelberg, 1953),
p. 134 and p. 168-69.

CHAPTER II

FIELD PROCEDURE

Although Germans in and around Edmonton do not
live side by side in colonies, yet they actively participate
in the life of their religious community. It was through
the pastor of a rural district close to Edmonton, where a
number of Germans are grouped around a Lutheran church,
that I made contact with my first informant, aged about
fifty. He had emigrated direct from Volhynia to Canada in
1928, and he still spoke German in the church community,
with neighbours, and with his mother since her recent arri-
val in Canada, circa 1946. Although he spoke German by
preference, his knowledge of English was exceptionally good.
Moreover he knew Ukrainian, and showed great understanding
of problems of language. He had not spent many years at
school, but the instruction he got was thorough, and he had
not forgotten it. This meant that he was extremely sensi-
tive to the standard orthography, which served as his norm
of pronunciation.

To begin with, I did not know whether there
actually was a Volhynian dialect; perhaps the scattered
colonies in Volhynia spoke different dialects; perhaps they
were not old enough to undergo the levelling process known
in German as "Ausgleich"; and, if there was a Volhynian
dialect, there was no saying to what main group of dialects

inside Germany proper it would belong. I had no way of
knowing whether my informant was a representative speaker
of an established Volhynian dialect; he might simply be
reproducing an inner German dialect learnt from his parents.
However, these questions were overshadowed by the necessity
of finding suitable material to serve as the subject matter
of the interviews.

The immediate problem of word lists arose, and in
this connection, the difficulty of deciding whether to limit
the linguistic items to be studied to a minimum, and try for
maximum coverage using as many informants as possible, or
whether to concentrate on one or two informants using a
large number of items. In theory, an infinite number of
in-between solutions were possible. This question of few-
items-many-informants or few-informants-many-items seems to
be a perennial one in dialect field work.[1]

The second of the two extremes mentioned seemed to
be more appropriate where a team of field workers were avail-
able to cover a large area of ground with a limited stock of
questions, the answers to which can be plotted on a map, thus
producing a linguistic atlas. It is because I was working
alone that a compromise solution near the other extreme was

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[1]'Chaque commune d'un côté, chaque mot de l'autre...
Ces deux pôles d'attraction...' (G. Tuaillon, "Exi-
gences théoriques et possibilités réelles de l'enquête
dialectologique," Revue de Linguistique Romane, XXII
(July-December 1958), 307.

chosen, i.e. comparatively few informants and a comparatively large number of items. This at least was the intention, but two further difficulties arose: one was the lack of suitable word lists, and the other was the lack of the one or two more informants I would need.

The word-list chosen was a basic list of 216 words in English, all concerning fundamental human experience but obviously too small to be in itself the basis of any general findings. Furthermore, the informants I was always hoping to find in plenty did not turn up, and time was lost in following up false leads, mainly due to a widespread ignorance of the exact location of Volhynia. But a start was made. The interviews were conducted in a very informal way, and sometimes, admittedly, little work was done of an evening. The word-list was used in this way: each word was read out in English, and the immediate response was transcribed in I.P.A. script. This did not usually present much difficulty. However, it was later discovered that the transcription was too broad. There is a marked tendency towards underdifferentiation for a language which does not sound too unfamiliar.

Moreover, one has only a certain time to spend on each word. One may be determined to hear everything there is to be heard about each sound in the word all at once, but one finds one can concentrate on only one or two things at a time. One asks for a repetition to hear the quality of the vowel, and another repetition to hear whether the "r" is

trilled or fricative, and so on. The informant may be very accommodating, but he gets bored. It is for this reason that it was found expedient at a later time to do the same list over again on a tape-recorder.

A word might be said here about the relative merits of this instrument. It is fortunate that the farm-houses in Alberta have power, so that a reliable machine could be used. Possible objections to tape-recording are: 1) it may not accurately record or reproduce some of the fine details, 2) we are left with a sound, but we cannot see the mouth that produced it, and 3) it may put off people who get a kind of stage fright, when a microphone is thrust into their hand.

These objections are easily answered: 1) a good tape-recorder, properly used, misses nothing, 2) the inter-viewer has more leisure to watch lip or jaw movements when he is not working on a phonetic transcription, and 3) most people rather enjoy recording their voice after the initial repugnance is overcome. The advantages are speed of proce-dure, permanence of the record, and avoidance of repetitions, thus of the danger of changed forms.

This brings us to the next stage. One cannot go on for ever recording phonetic minutiae which even the speakers themselves do not hear or do not regard as essen-tial features of their system of sounds. In other words,

one has to "phonemicize." On the basis of the material I had, I made a tentative phonemicization. Having done so--rather rashly perhaps--the temptation was to use it to record "texts" i.e. connected discourse, with the help of the tape-recorder. My Volhynian friend agreed to give the story of his life in Canada, on tape (174 ft. at 3 3/4 speed), and this was transcribed using my new alphabet, which seemed to work.

However, theoretical considerations made it necessary to establish the phonemic system on a surer foundation than a 216-word list and my own impressions. Check-lists of words likely to be familiar to the informant were made out, bringing together in various positions sounds which I thought had the same phonemic value. The knowledge of what was familiar to the informant increased as my weekly visits continued. Altogether, there were roughly one thousand items, all recorded on tape. In spite of the fact that these words were spelt in the usual German spelling--with its normalizing effect on the informant's pronunciation--these lists proved to be of great value in establishing the phonemic system which was used later, and they are the basis of the symbols used in the present description.

It would be tedious to report in detail all my work with informants, for more eventually did appear, and

several reels of connected discourse were taken from these "auxiliary" informants as Kurath[2] calls them. All these recordings show common features which tend to confirm that Volhynia does in fact have a dialect of its own. Not all of this material has been used, and it is hoped to continue the work of analysis into the fields of morphology and syntax. In the meantime, the present study has been confined to phonology.

While there is general agreement on the basic principles of phonology, methodological problems still arise in the application of these principles to a particular dialect[3]. In what follows, some slight indication is given as to the problems which arose during the course of the investigation.

For example, when two similar phones are in complementary distribution, e.g. $[k]$ before high front vowels and $[k]$ before high back vowels, we suspect that like the butler and the murderer who never appear on stage together, they are one and the same character, the rather serious dissimilarity being interpreted merely as a difference of disguise. This was the solution adopted for all the velars in Volhynian German, giving a series /k, γ, x, ŋ/ which show a wide range of point

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[2]Hans Kurath, Handbook of the Linguistic Geography of New England (Washington, 1954), p.161.

[3]For general principles see e.g. Charles Hockett, A Course in Modern Linguistics (New York, 1958), which also deals with the procedure to be followed in setting up the phonemes from material gathered in the field. See in particular pp. 15-26, and 102-11).

of articulation according to phonetic context.

The second example deals with the chief characteristic of Volhynian German, namely "Entrundung." My main informant, who was about fifty years old, would, when prompted by his mother, produce rounded forms of high front vowels which he normally produced unrounded; and his mother liked to sit through the interviews and make sure her son made no mistakes. Yet both he and she would regularly produce unrounded forms in conversation.

Since the pronunciation would vary from rounded to unrounded or vice versa within a few moments, it seemed quite impossible to keep track of them. With some misgivings, the writer decided to record those forms that seemed most natural and most frequent: in this way, and to this extent, he has been guilty of some "normalization."

Even so, if we compare the presumed phoneme pairs of rounded and unrounded vowels /i:-ü:, i-ɣ, e:-ø:, e-œ, ai-oi/, the case for their merger could be made out as follows.

1. They are similar: the spread forms are centralized; the rounding of the rounded forms is a vertical rounding, which is difficult to recognize.[4]

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[4]"A long narrow slit is produced between the two lips by bringing the lips vertically nearer each other. This is called vertical lip rounding." See R-M. S. Heffner, General Phonetics (Madison, 1949), p. 98. See also Appendix E for photographs of informant's lip-position taken during pronunciation of the vowels.

2. They occur in free variation in the same word spoken by the same speaker at different times.

3. As a phonemic opposition, their yield in differentiating words is small. If a count is made for a number of words out of a standard dictionary, the yield is maybe as low as 7%. No doubt, the yield for any particular dialect, having a more restricted vocabulary range, would be much smaller. For this reason each pair was treated as one phoneme, giving the series of high centralized front vowels /i:, i, e:, e/, and the diphthong /ai/.[5]

To establish the phonemes of a language, an over-all view is necessary. To some extent it is a matter of judgement --the best judge, of course, being the native speaker; though being an expert, all his judgements are automatic. The student has to try deliberately to infer the system from the unself-conscious usage of the informant. This remains something of an art.

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[5]Usually "Entrundung" affects a whole series of sounds: see Eugen Dieth, <u>Vademekum der Phonetik</u> (Bern, 1950), p. 352.

CHAPTER III

PHONOLOGY

A. INTRODUCTION

The writer follows the usual division of speech
sounds into consonants and vowels based on friction noise
and resonance as well as their function in the syllable;
vowels function in the main as the nucleus of the syllable,
and consonants generally do not. A further classification
would yield a sub-group of "semi-vowels" within the vowels,
and a sub-group of "syllabic consonants"[1] within the con-
sonants. Semi-vowels are vowels capable of serving as
consonants within the syllable, and not as syllable nuclei.
Syllabic consonants are consonants capable of·serving as
syllabic nuclei, e.g. the liquids and nasals. There
are no semi-vowels in the phonemic system of the present
dialect. The random occurrence of syllabic consonants,
functioning as such, has no phonemic significance.
From here on, syllable nuclei are referred to as "vowels,"

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[1] See Kenneth L. Pike, Phonetics (Ann Arbor, Michigan, 1958)
p. 118, and
R-M. S. Heffner, General Phonetics (Madison, 1949) p.114.
Leonard Bloomfield, Language (New York, 1933), pp. 121-24,
calls them "sonants."
Eugen Dieth (esp. p. 169) uses the term "Halbkonsonante,"
but the term "semiconsonants" has a different meaning in
America.

and the sounds accompanying these in the syllable, as "consonants."

As a result of an examination of the distribution of allophones, which will be given later, and the following considerations the system of sounds which serve to distinguish the meanings of words i.e. "phonemes" was established. These are illustrated in the charts which follow, together with a brief general discussion of the vowels and consonants as separate groups.

B. VOWELS

The vowel system of the present dialect evinces a three-way contrast of tongue-height, tongue advancement and lip-rounding. There are three tongue heights, namely low, mid and high; and two degrees of advancement and retraction, namely central and back. Two glides are in evidence, namely from low-central to high central, and from low-central to high-back.

1. Lip-rounding. By this is meant what Heffner calls "vertical" lip-rounding, in which "a long narrow slit is produced between the two lips by bringing the lips vertically nearer each other."[2] There is no lip-protrusion, but

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[2]Heffner, p.98. See also Appendix E for photographs of lip-positions.

in the position for "u" there is extra contact at the
extremities of the lip aperture.

Rounding is tied to the other factors of tongue
advancement and tongue height, insomuch as back vowels are
more rounded as tongue-height increases. In the case of
the central series at all heights, rounding appeared in
free variation with non-rounding.

2. <u>Vowel length and tension</u>. Phonemically distinct from the
series of simple vowel contrasts, phonemicized as /i,e,a,o,u/,
described above, there is a parallel series of vowels showing
features of both length and increasing tension. Phonetically,
they were interpreted as glides from the position of the
simple vowel to a higher and tenser variety in the same region.[3]
Since increasing height and tension always accompany increased
length, the whole phenomenon was regarded as one contrastive
feature called for convenience "length," and phonemicized as
/:/.[4]

Generally the vowel in the stressed syllable is
short before /x, š/, and before a group of consonants,[5] e.g.
/bux/ tux/ visen/ furxt/ 'book', 'cloth', 'wipe', 'fear'.

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[3]For a fuller discussion of glides see e.g. Heffner, p.110.

[4]Bloomfield, p.109, mentiones the fact that length is a
much more noticeable feature than tension in standard
German.

[5]Consonants with extra length count as consonant clusters,
e.g. [bà k·ᵋn̩]

Exceptions occur before clusters in which the second element
is a dental, e.g. /eːr̩de/ 'earth', /šlaːft/ 'sleeps', /liːxt/
'lies', /feːrt/ 'horse'.

No other distinction of length was discovered except
that of "simple" and "simple plus length" just described.

The above remarks refer particularly to vowels in
stressed syllables. The features of rising height and ten-
sion are hardly perceptible in positions of reduced stress,
and are simply not present in unstressed syllables.

3. Diphthongs. In the glides /ai/ and /au/, the tongue moves
from one lax position to another. Both elements have the
same degree of length and acoustic prominence. The transiti-
onal glide is relatively abrupt. The diphthongs are regarded
as long vowels phonemically in this study.

4. Centralization. The centralization of high vowels is
discussed by Heffner in the following terms: " . . . although
they remain high vowels, the whole articulatory position is
moved horizontally so that the maximum elevation of the tongue
is medio-palatal rather than prepalatal as it is for normal [i]
. . . We need to recognize an unrounded and a rounded centralized
vowel, and it is helpful in addition to say whether the vowel
is a centralized front vowel or a centralized back vowel. The
boundary between the latter two categories is very unstable
and the International Phonetic Association does not recognize

the difference."[6] In the present dialect they are taken to
be front rather than back, but with the peculiar form of
rounding mentioned above, it was found to be practically im-
possible to say when they were rounded and when they were
unrounded. When some rounding became evident, it was gene-
rally the result of an attempt at "correctness." Special
efforts in this direction often produced hypercorrect forms
at variance with standard German.

C. CONSONANTS

There are two bilabial stops and two blade-
alveolar stops. Within each pair the contrastive feature is
voicing. The voiceless dorso-velar stop has no voiced coun-
terpart. There are pairs of labio-dental, blade-alveolar,
and velar fricatives, each pair showing contrast of voicing,
also a frontal palato-alveolar voiceless fricative, and a
voiced frontal-palatal fricative. The alveolar and palato-
alveolar fricatives are grooved--the latter more so than the
former. There are three nasals--one bilabial, one blade
alveolar, and one dorso-velar--all voiced. There is also a
blade-alveolar voiced lateral and an apical voiced trill.

1. Length. Voiceless stops and fricatives were held longer
both intervocalically and finally after short vowels, thus
confirming the theory of syllable balance outlined by Dieth,

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[6]Heffner, p. 109.

but there is no evidence of gemination.[7]

2. <u>Voicing.</u> Voicing is used as a distinctive feature in a number of pairs of stops and fricatives. This applies, however, only to initial and intervocalic position. The distinction is nullified in word-final position, where only unvoiced forms occur. It is often difficult to find minimal pairs illustrating voiceless/voiced contrast in the intervocalic position, mainly because the question of vowel length and voicing are interrelated. There is a tendency, as in many other languages, for intervocalic voiced stops to be preceded by long vowels. It is easy to find pairs such as /reten/ and /re:den/, and the frequency of such pairs is evidence for the tendency mentioned. But we do not find many pairs such as /ba:den/ and /ba:ten/, and in this instance, the second form would not be part of the informants' active vocabulary.[8] [d] does not occur intervocalically after short vowels. Therefore, the bulk of evidence required to justify that [d] and [t] are separate phonemes lies with the initial position. Here again,

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[7]Dieth, p. 134: "Silben-Ausgleichs-Regel." For the dilemma whether to choose vowel length or consonant length as phonemic in such balanced syllables, see Kemp Malone, "Long and short in Icelandic Phonemics," <u>Language</u>, XXIX (1953), 61-62.

[8]The past tense is regularly formed with auxiliary and past participle.

minimal pairs (e.g. /du:/ and /tu:/) are not plentiful.
Similar examples can be found for the other voiced/voiceless
pairs in the dialect. However, since substitutions of the
informants' [d] for [t], or vice versa, made by the inves-
tigator, were never acceptable, it has been assumed that
they were regarded as different sounds by the speakers. The
same can be said for the other pairs mentioned.

Particularly in the case of the pair "s,z", of
which only the voiced variety appears in initial position,
we are forced to base separate phonemic treatment on a very
few cases, such as /fli:zen/ and fli:sen/, again on the grounds
that if the informants' [z] replaced the [s] of /vaser/, he
would not recognize the word.

No examples of devoicing of the liquids or nasals
were heard. /j/ is always voiced, and /š/ always unvoiced.
Thus it can be affirmed that voicing as a source of phonemic
contrast within the consonant system is not productive.

3. Tension. The voiceless members of the pairs which show
contrast of voicing are always more tense than the voiced.
An attempt was made, when listening to the informant, to
isolate tension from voicing, and to treat each separately.
For this reason, in both phonetic and phonemic transcription,
whenever a consonant was heard as unvoiced, the appropriate
symbol for unvoiced consonant was used, no matter how "lenis"
the sound was articulated. The alternative would have been to

use such symbols as $[\underset{\circ}{d}]$ meaning a lenis voiceless alveolar
stop, but this does violence to the convention that $[t]$ is
voiceless and $[d]$ is voiced, and seemed to be less satisfac-
tory than $[\underset{\mapsto}{t}]$.

No attempt was made to indicate any differences of
tension in $[l,r,m,n,\eta]$.

Reduced tension in normally fortis sounds $[p,t,k,$
$f,s,x]$, noted as ⊢, occurred finally after long vowels;
their voiced equivalents were heard only as lenis in all
positions.

Although in general the tension of fricatives is
relatively lenis, since there is no complete closure or build-
up pressure, there are nevertheless degrees of tension within
the range of occurrences of any fricative; this tension is
manifested in extra length: e.g. compare "Ofen" with "offen."

4. <u>Release</u>. Aspirated release of voiceless stops is always
in evidence. In the initial position, before vowels and
voiced consonants, the transition from voicelessness to
voicing is very close, and the intervening aspiration may be
scarcely audible. Its presence can nevertheless be ascer-
tained, beyond all doubt, by a simple hand-to-mouth test.
Aspiration is not a prominent feature of the dialect.

Another characteristic feature of the articulation
and release of voiceless stops, and which, I believe, makes
for minimal aspiration, is a wide area of rather firm contact.

The release is effected simultaneously over the whole
width of contact area. The voiced stops share this same
feature of width of contact, but of course, being lenis,
without the firm articulation.

One or two examples of nasal release, such as
[špalt̩ᴺn̩] were heard, but these are not regarded phonemically
significant.

Affrication as a form of release from the bilabial
and alveolar stops occurs regularly in intervocalic and final
positions after short vowels, e.g. /apfel/ 'apple', and /hit-
se/ 'heat', also after short vowel plus /r,l,m,n/, (/pf/
after /m/ and /ts/ after /r/ and /n/), e.g. /herts/ 'heart',
/pelts/ 'pelt', /ɣrentse/ 'border', and /štumpf/[9] 'blunt'.
However, in initial positions, only /ts/ is in regular use;
/pf/ occurs, but is a sign of careful speech, e.g. /pfarer/
'minister'.

The feature of length which we expect intervocal-
ically after short vowels shows in the duration of closure
before the stop is released into the homorganic fricative.

In spite of the close transition from stop to fri-
cative, there seemed to be no special advantage in treating
affricates as single phonemes in the present study.

5. <u>Lateral, trill, nasals.</u> These are specially stable, being

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[9]An alternative form is /štump/.

little affected by their environment. They are never
voiceless. They all show variations in length, according
to position, which correspond to tension in stops and fri-
catives. All have a special function in unstressed syllab-
les where they are more prominent than the vowels.[10]

6. Specific phonetic considerations.

/f,v/. Labiodental voiceless and voiced fricatives.
Some such term as "bi-labio-dental" might have been more
appropriate as an indication of the difficulty of deciding
whether the bilabial or the labio-dental quality predomina-
tes, since both manners of articulation are simultaneously
present. "Labio-dental" has its usual meaning of constric-
tion between lower lip and upper teeth, but, in a description
of the sounds, the position of the upper lip has also to be
considered. If a comparison with English is useful, the
difference between English "v" and the sound under considera-
tion is, that with the slight lip-protrusion of the former,
there is a tendency to curl the upper lip upwards and away
from the lower (though if this is exaggerated it deforms the
sound completely), while with the width of lip-participation
characteristic of the present dialect, the top lip does not
tend upwards but rather downwards--thus giving a bilabial
quality to the sounds, not present in English "f,v," but
reminiscent of dialectal English ("wh" and "w" as in "where"
and "were", i.e. $\left[\emptyset, \beta \right]$).

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[10] See under "Unstressed syllables" below, p. 62.

/ɣ/. Velar voiced fricative. This sound sometimes gives the impression of a very lax $\lceil g \rceil$, but closer examination reveals continual friction noise throughout.

/ɣ,x,k,ŋ/. The velars, i.e. /ɣ/, its voiceless equivalent /x/, the voiceless stop and the nasal all share the same range of modification according to speech context. The precise tongue height of the body of the tongue at each realization of the sounds varies according to the vowel context. Thus, in monosyllables, when followed by an "i" vowel, the sound acquires an "i" timbre, and similarly for the other vowels. Moreover, the area of tongue-velum constriction is variable according to context, being further forward for front vowels, and further back for back vowels. This in itself would give various qualities to the sounds without any tongue raising or lowering. With diphthongs following, it is not only the first element that has the decisive influence: the initial sounds /ɣaiɣe/ 'fiddle', and /ɣaumen/ 'gum' are different, the former resembling the initial of /ɣe:en/ 'to go ' and the latter resembling the initial of /ɣa:r/ 'cooked'. The same could be said of /kain/ 'no', and /kaum/ 'scarcely'. Intervocally, the vowel with the greater stress has the decisive influence. In consonant clusters, this influence is blocked by semi-consonants, /m,n,l,r/,[11] which count as "e" or "i"

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[11] ŋ is not included because it itself is variable like the other velars; in /tsaituŋx/ for example, /x/ has "u" quality.

vowels in this respect.

It should be noted here that there is a phonological distinction to be made between /ɟe:/ go, and /je:/ ever. If the tongue is in the position to pronounce the former, and the back of the tongue is then removed from the velum without changing the [e] position of the rest of the tongue a pure vowel will result; there will be no consonantal i.e. frictional noise. The frictional noise comes from the partial dorsum-velum closure, and not from partial closure between tongue-front and hard palate, as in the case of /j/, which may be produced without any constriction in the soft palate area.

The parallel distinctions which could be made between [x̢] and [ç] (devoiced [j]), and [k̢] and [c], are irrelevant to the present discussion, since neither [ç] nor [c] belong to the phoneme system of the dialect.

D. PROSODY

1. <u>Stress.</u> There are three degrees of stress which can be called "full" (/), "half" or "reduced" (\), and "unstressed" (unmarked), though Heffner[12] would prefer "minimal" for the latter; e.g. /lé:derjàk/ "leather jacket." This is an example of a noun compound; it shows a typical stress pattern.

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[12]Heffner, pp.225-226. Alternative terms are "primary, secondary."

Derivational affixes frequently carry reduced stress; e.g.
/gástvirtšàft/ 'hotel', /náxbà:r/ 'neighbour', /fráihait/
'freedom', /fúrxtsàm/ 'fearful', /héktàr/ (a land measure),
/jé:nsàit/ 'beyond', /álkohò:l/ 'alcohol', /kilomé:ter/
'kilometer'. The pattern in the last example can also be
seen in such phrases as /maine múter/. The main syllable of
verbs formed by verb-compounding adverbs may receive reduced
stress; e.g. /áptsì:en/ 'to take off', /aúfgestànden/ 'stood
up' (past part.); but may also have full stress, e.g. /ferló:-
ren/ 'lost' (past part.), /erkánt/ 'recognized' (past part.).

It is not clear to what extent vowels under reduced
stress differ in quality. What is evident is that they often
lose their length. This can be demonstrated best by means of
a comparison of vowel length in words which are identical in
meaning for the speaker but which have short and long forms
depending on their use in the sentence, e.g. /ja/ expletive,
/ja:/ 'yes'; /zo/ expletive, /zo:/ 'so'. The first in each
pair has minimal stress, but its vowel retains its quality.
There is no tendency towards the central position.

2. <u>Intonation.</u> Intonation and stress are closely bound up
together as features of accentuation. The greater the stress,
the higher the pitch.

Three levels of pitch can, however, be isolated.
These are varied in many ways by skilful speakers; nor are
they absolute, but only relative levels. The voice rises
to the highest pitch on the main syllable of the word (usually
a noun, or a verb) that is to receive the greatest prominence

in the utterance;

e.g.

       1   23   32   1
/ix va:r ze:r krank auf dem šif↓/
"I was very sick on the ship."

Sometimes the same level is maintained over a number of

syllables;

e.g.

     1 3 2   3
/da vurde ix auf maines fa:ters bukel genomen|/ (incomplete
"Then I was taken on my father's back..."   utterance)

There may be a gradual transition from one level to another;

e.g.

     3   2
/manxmal va:r es zo: geve:zen|/ (gradual fall from 3 to 2)
"Sometimes it happened..."

The sequence of pitch levels 3, 2, 1, distributed over the

three fully stressed words of the following sentence show that

stress is not always tied to pitch; the effect is to isolate

and so emphasize to the maximum:

     1 2 1   2   3   2 1
/ix kan maine muter nixt me:r ze:en↓/
"I can never see my mother again."

Here is a question:

     2   1   3
/vali bist du: das↑/
"Wally, is that you?"

A longer question requesting verification:

     1 3   2   32   23
/das va:r vo:l aine halbe mail nixt↑/
"That would be about half a mile wouldn't it?"

A question followed by a command--both pleading:

     1   3   2   3 2 1
/unt du kanst nixt|/   /kom dox haim↓/
"and you cannot?--   Come home!"

Friendly insistence is implied in the paternal tones of the
family doctor speaking to the over-studious boy in the follow-
ing example, illustrating at the same time a pitch glide
within a single syllable:

    2 3   23
   /bixer vek↑/
   "Enough of books!"

     These few examples will serve to demonstrate something
of the variety of intonation patterns which can be achieved with
the three basic pitch levels. It must be remembered too that
a new pattern may be inserted in the middle of a larger pat-
tern, for example in reported speech. Thus, the possibilities
of variation are endless.

3. <u>Juncture.</u> If we consider the sequence [št] in connected
speech, we find that there are two ways of moving from the
first sound to the second, e.g.

    /aufɣetišt/ and /tištux/

the difference is one of close transition and distinct tran-
sition. Hockett calls them "muddy" and "sharp." The second
variety is known as "plus juncture," its symbol being /+/.

      No cluster of /sn/ occurs at the beginning of any
of the single utterances collected. In the phrase /esen ɣa:ps
nixt/ 'there was nothing to eat', we assume juncture between
/s/ and /n/, rather than between /p/ and /s/ which is a
possible sequence. Plus juncture is most evident in sequences
of stressed morphological forms e.g. /main li:ber menš/.

Since the customary separation of words shows where plus
junctures occur, they are usually omitted.

Comparing /aberix tu:/ with /aber ix/, we find
that /ix/ in the second case begins with glottal stop. In
/hap ix/ the /p/ occurs in its semi-lenis unaspirated form.
This would suggest plus juncture is that kind of transition
which precedes glottalized vowels and follows semi-lenis
voiceless consonants, such as $\left[p^{\scriptstyle 1}_{\vdash} \right]$. However this question
would require further study.

There follows a list showing the distribution of
the sounds of the dialect grouped under their respective
phonemes.

E. TABLE OF PHONEMES

Vowels

	Simple		Long	
	i	u	i:	u:
	e	o	e:	o:
	a		a:	

Diphthongs: ai au

Consonants

	BILABIAL	LABIO-DENTAL	ALVEOLAR (dental)	PALATO-ALVEOLAR	PALATAL	VELAR
STOP	p b		t d			k
FRICATIVE		f v	s z	š	j	x ɣ
NASAL	m		n			ŋ
LATERAL			l			
TRILL			r			

Stress. Full: ╱ . Half ╲ . "Unstressed": unmarked.
Pitches: 1 2 3.   Terminal contours: | ↑ ↓ .
Transition. Plus juncture: /+/.

F. ALLOPHONIC VARIATIONS

The following are lists of vowel ·and consonant phonemes in evidence in stressed positions, showing positional and random variants.[13]

1. Vowels

/i/   Lax high central vowel.

⌈ɪ⌉   E.g. /rinde/ 'bark' /kint/ 'child' /ziŋen/ 'to sing'
      /din/ 'thin' /lipe/ 'lip' /mit/ 'with' /dik/ 'thick'
      /kisen/ 'cushion! 'to kiss' /zitsen/ 'to sit'
      /bixer/ 'books' /lixt/ 'light' /fiš/ 'fish'
      /ɣehirn/ 'brain' /hirt/ 'shepherd' /ɣirtel/ 'belt'.

/i:/ A glide from /i/ towards greater tension and height.

⌈ɪ̃ï⌉ E.g. /i:m/ 'to him' /ɣri:n/ 'green' /zi:p/ 'sieve'
      /zi:ben/ 'seven' /zi:t/ 'south', '(he) sees'
      /li:der/ 'songs' /zi:x/ 'victory' /fli:ɣe/ 'fly'
      /bri:fe/ 'letters' /di:s/ 'this' /ši:sen/ 'to shoot'
      /ɣemi:ze/ 'vegetables' /ri:xen/ 'to smell'
      /hi:r/ 'here' /ti:re/ 'animals' /fi:rte/ 'fourth'.

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[13] Allophonic variations are shown at the left in phonetic script, within square brackets.

By far the greater number of the examples given in phonemic transcription in the following lists are either monosyllabic with main stress or disyllabic, consisting of one syllable carrying main stress, followed by an unstressed syllable. Where the stress pattern is different it is marked.

/e/   Lax mid central vowel.

[Ė]   E.g.   /brenen/ 'to burn'   /ven/ 'if'   /denken/ 'to think'
      /trepe/ 'stairs'   /fet/ 'fat'   /drekix/ 'dirty'
      /trefen/ 'to meet'   /esen/ 'to eat'   /est/ '(he) eats'
      /drešen/ 'to thrash'   /štexen/ 'to stab'   /šlext/ 'bad'
      /herts/ 'heart'   /štern/ 'star'   /erpsen/ 'peas'
      /erbe/ 'inheritance'   /šterben/ 'to die'   /ɣelp/ 'yellow'
      /švester/ 'sister'   /verk/ 'work'.

/e:/   A glide from /e/ towards greater tension and height.

[Ēė]   E.g.   /tse:n/ 'ten'   /je:ne/ 'that'   /ne:bel/ 'mist'
      /kre:ps/ 'cancer'   /šte:t/ '(he) stands'   /šte:te/
      'towns' (large)   /re:ɣen/ 'rain'   /le:zen/ 'to read'
      /ɣe:en/ 'to go'   /šve:r/ 'heavy'   /he:ren/ 'to hear'
      /he:rt/ 'hearth'   /e:rde/ 'earth'   /tse:len/ 'to count'
      /ve:x/ 'way'   /le:xt/ '(he) lays'   /he:xste/ 'highest'.

/a/   Lax low central vowel.

[ȧ]   E.g.   /lam/ 'lamb'   /man/ 'man'   /laŋ/ 'long'
      /zant/ 'sand'   /šlaŋe/ 'snake'   /tantsen/ 'to dance'
      /lapen/ 'rag'   /ɣrap/ 'grave'   /ɣlat/ 'smooth'
      /hate/ 'had'   /haken/ 'to cut'[14]   /afe/ 'monkey'

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[14] Used in the phrase /buš haken/, 'to cut bush'.

/nas/ 'wet' /vaser/ 'water' /aše/ 'ashes'

/naxt/ 'night' /laxen/ 'to laugh' /jaxten/ 'to hunt'

/hart/ 'hard' /švarts/ 'black' /šarf/ 'sharp'

/varm/ 'warm' /falen/ 'to fall' /kalt/ 'cold'.

/a:/ A glide from /a/ towards greater tension and height.

[ā͞æ] E.g. /na:me/ 'name' /tsa:n/ 'tooth' /a:ber/ 'but'

/a:tem/ 'breath' /yerá:de/ 'straight' /za:yen/ 'to say'

/štra:fen/ 'to punish' /štra:sen/ 'streets'

/bla:zen/ 'to blow' /ta:x/ 'day' /bra:xe/ 'fallow'

/ja:r/ 'year' /ha:re/ 'hair' /á:rbàiten/ 'to work'

/fa:rt/ 'drive' (subst.) /ma:lt/ '(he) grinds'

/ha:ken/ 'hook'.

/o/ Lax mid back vowel rounded.

[Ω] E.g. /tone/ 'barrel' /zone/ 'sun' /komen/ 'to come'

/konte/ 'could' /yrop/ 'rough' /mote/ 'moth' /yot/ 'God'

/štok/ 'stick' /troken/ 'dry' /štof/ 'material'

/ofen/ 'open' /yešlósen/ 'closed' /koxen/ 'to cook'

/tol/ 'crazy' /rolen/ 'to roll' /dort/ 'there'

/korn/ 'corn' /most/ 'new wine' /knospe/ 'bud'

/koxt/ '(he) cooks' /kotsen/ 'to vomit'.

/o:/ A glide from /o/ towards greater tension and height.

$\left[\widehat{\stackrel{>}{\Lambda o}}\right]$ E.g. /lo:n/ 'wages' /o:ne/ 'without' /lo:p/ 'praise'

/lo:ben/ 'to praise' /šro:t/ 'chop' (feed) /o:der/ 'or'

/mo:s/ ' moss' /ho:ze/ 'pants' /ko:l/ 'cabbage'

/o:r/ 'ear' /yebó:ren/ 'born' /o:fen/ 'stove'.

/u/ Lax high back vowel, rounded.

$\left[\check{\text{U}}\right]$ E.g. /dum/ 'stupid' /brunen/ 'well' /šupen/ 'scales'

/futer/ 'feed' (subst.) /šluken/ 'to swallow' /fus/ 'leg'

/ruse/ 'Russian' /tux/'cloth' /runt/ 'round' /štunde/

'hour' /yurke/ 'cucumber' /kurts/ 'short' /durx/

'through' /furxe/ 'furrow'.

/u:/ A glide from /u/ towards greater height and tension.

$\left[\widehat{\stackrel{>}{\text{U U}}}\right]$ E.g. /štu:be/ 'room' /mu:t/ 'courage' /bru:der/

'brother' /klu:yer/ 'clever' /beru:f/ 'trade'

/blu:ze/ 'blouse' /kru:x/ 'jug' /šu:le/ 'school'

/u:r/'watch'.

2. Diphthongs

/au/ A glide from /a/ to /u/.

$\left[\overset{\bullet}{\text{à}}\underset{\smile}{\text{U}}\right]$ E.g. /baum/ 'tree' /baux/ 'belly' /haupt/ 'head'

/laus/ 'louse' /ferfáult/ 'rotten' /rauxen/ 'to smoke'

/haut/ 'skin' /zauyen/ 'suck' /frau/ 'woman'.

/ai/   A glide from /a/ to /i/.

[ȧɨ]   E.g. /vail/ 'because' /ai/ 'egg' /vait/ 'far'
       /ainiɣe/ 'some' /ais/ 'ice' /raiben/ 'to rub'
       /haite/ 'to-day' /vaip/ 'wife' /nain/ 'no, nine'.

3. Consonants.

/b/   Bilabial voiced stop. Lip tension is lenis. Initially,
       voicing does not generally occur before release, i.e.
       there is no vibration during pressure build-up. Aspi-
       ration is minimal. The tension is especially weak in
       intervocalic position. /b/ does not occur at all in
       word final position. Occurrence is as follows:

[b]   initially before vowels and semi-consonants;
               e.g. /bi:ten/ 'to offer' /bite/ 'please'
               /be:re/ 'berry' /belen/ 'to bark'
               /ba:den/ 'to bathe' /baken/ 'to bake'
               /bo:nen/ 'beans' /borke/ 'bark' /bux/ 'book'
               /baux/ 'belly' /bain/ 'leg' /bla:zen/ 'to
               blow' /bru:der/ 'brother';
               intervocalically after long vowels only,
               e.g. /zi:ben/ 'seven' /štre:ben/ 'to strive'
       /a:ber/ 'but' /lo:ben/ 'to praise' /štu:be/
       'room' /ɣlauben/ 'to believe' /traiben/ 'to
       drive';
       in consonant clusters with voiced consonants,

e.g.   /bombe/ 'bomb'   /fa:rbe/ 'colour'

/kelber/ 'calves'   /i:brix/ 'remaining'.

/p/   Bilabial voiceless stop.   Lip tension is fortis.
Aspiration is never strong.   Positional and random
variants are as follows:

$\left[p^{'} \right]$ initially before vowels and semi-consonants,
e.g.   /pike/ 'pick'   /pa:r/ 'pair'   /paken/
'to grasp'   /post/ 'mail'   /pu:te/ 'turkey'
/putsen/ 'to clean'   /pain/ 'pain'   /paul/
'Paul'   /profé:t/ 'prophet';

$\left[p^{.'} \right]$ intervocalically after short vowels,
e.g.   /lipe/ 'lip'   /tepix/ 'carpet'   /lapen/
'rag'   /jope/ 'jacket'   /rupel/ name of in-
formant;

$\left[p^{'} \right]$ finally after long vowels,
e.g.   /ɣra:p/ 'dig'   /zi:p/ 'sieve'   /lo:p/
'praise'   /taup/ 'deaf'.
Further occurrences for which a regular pattern
of length and tension could not be determined:

$\left[p \right]$ $\left[p^{.'} \right]$ $\left[p^{'} \right]$
intervocalically after long vowels (rare),
e.g.   /pi:pen/ 'to squeak'   /raupe/ 'grub';
finally after short vowels,
e.g.   /ɣrap/ 'grave'   /ɣrop/ 'rough';

in consonantal clusters,

e.g. /kre:ps/ 'cancer' /vespe/ 'wasp'

/haupt/ 'head' /hipš/ 'pretty' /erpsen/

'peas' /γelp/ 'yellow' /apfel/ 'apple'

/štump/ 'blunt' /špalten/ 'to split'.

/d/ Blade alveolar voiced stop. Tongue tension is lenis.
Aspiration is minimal. Intervocalically the tongue
tension is very weak. Although the apex of the tongue
is in use, it is not pointed. In word-final position,
/d/ does not occur at all. Occurrence is as follows:[15]

$\left[\underset{\smile}{d} \right]$ initially before vowels and semi-consonants,
e.g. /di:s/'this' /dik/ 'thick' /dre:en/ 'to
turn' /deŋken/ 'to think' /da:/ 'there'
/dax/ 'roof' /do:ze/ 'box' /dox/ 'of course'
/du:/ 'you' /dum/ 'foolish' /dain/ 'your'
/daumen/ 'thumb';

intervocalically after long vowels only,
e.g. /li:der/ 'songs' /fe:der/ 'feather'
/fa:den/ 'thread' /o:der/ 'or' /bru:der/
'brother' /šnaiden/ 'to cut' /šauder/
'shudder';

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[15] [d, t] means in the present study "point of articulation
at an advanced position on the alveolar ridge, but
not necessarily against the inner surface of the
upper teeth," though the diacritic means this in
I.P.A. The precise point could not be verified,
but it sounded dental.

in consonant clusters with voiced consonants,

e.g. /andre/ 'other' /drai/ 'three' /hundert/
'hundred' /melden/ 'to announce' /šildner/
'debtors'.

/t/ Blade-alveolar voiceless stop. Tongue tension is fortis.
Aspiration is always present, but never strong. /t/,
unlike /d/, appears in word-final position though with
reduced tension--at least, after long vowels. Positi-
onal and random variants are as follows:[16]

$\left[\underset{\frown}{t}\right]$ initially before vowels and semi-consonants,

e.g. /ti:r/ 'door','animal' /teler/ 'plate'
/traiben/ 'to drive' /troken/ 'dry' /tantsen/
'to dance' /to:t/ 'dead';

$\left[\underset{\frown}{t^{\cdot\,\iota}}\right]$ intervocalically after short vowels,

e.g. /bleter/ 'leaves' /bite/ 'please'
/veter/ 'weather' /futer/ 'feed' (subst.)
/luter/ 'Luther';

$\left[\underset{\frown}{t^{\iota}}\right]$ finally after long vowels,

e.g. /blu:t/ 'blood' /ro:t/ 'red' /yu:t/
'good' /bro:t/ 'bread' /za:t/ 'seed'.

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[16] $\left[\underset{\frown}{d},\underset{\frown}{t}\right]$ means in the present study "point of articulation
at an advanced position on the alveolar ridge, but
not necessarily against the inner surface of the
upper teeth," though the diacritic means this in
I.P.A. The precise point could not be verified,
but it sounded dental.

Further occurrences for which a regular pattern of
length and tension could not be determined:

$$\left[\begin{smallmatrix}t\\{}_{\Gamma\!\dashv}\end{smallmatrix}\right] \quad \left[\begin{smallmatrix}t\cdot\\{}_{\frown}\end{smallmatrix}\right] \quad \left[\begin{smallmatrix}t^{\mathsf{c}}\\{}_{\Gamma\!\dashv}\end{smallmatrix}\right] \quad etc.$$

intervocalically after long vowels,

e.g. /fa:ter/ 'father' /soldá:ten/ 'soldiers'

/bra:ten/ 'to fry' /ne:tix/ 'necessary'

/laite/ 'people';

finally after short vowels,

e.g. /ɣlat/ 'smooth' /mit/ 'with';

in consonantal clusters,

e.g. /tsaixen/ 'sign' (subst.) /tsaun/ 'fence'

/hitse/ 'heat' /zitsen/ 'to sit' /švarts/

'black' /husten/ 'to cough' /švester/ 'sister'

/šlext/ 'bad' /jaxten/ 'to hunt' /axt/ 'eight'

/troken/ 'dry' /alt/ 'old' /špalten/ 'to split'

/kint/ 'child' /hundert/ 'hundred' /hemt/

'shirt' /zalts/ 'salt' /rexts/ 'right'

/furxt/ 'fear'.

/ɣ/   Voiced velar fricative. Tension is lenis. If there
is any contact during articulation, it is momentary;
but this is extremely doubtful.[17] No examples of /ɣ/
after a short vowel were discovered.[18] It does not

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[17] See general discussion under "Consonants" above, p. 29.

[18] The High German word for rye, "Roggen," was known, but
according to one informant, the usual word for rye in
Volhynia was /korn/.

appear in word-final position.

Positional variants are as follows:

$$\left[\underset{\underset{\frown}{i}}{\gamma}\right] \left[\underset{e}{\gamma}\right] \left[\underset{a}{\gamma}\right] \left[\underset{o}{\gamma}\right] \left[\underset{u}{\gamma}\right]$$

initially before vowels and semi-consonants,

e.g. /ɣi:sen/ 'to pour' /ɣe:ben/ 'to give'
/ɣelp/ 'yellow' /ɣa:r/ 'cooked' /ɣurke/ 'cucum-
ber' /ɣlat/ 'smooth' /ɣnik/ 'neck' /ɣri:n/
'green';

intervocalically after long vowels,

e.g. /e:ɣen/ 'to harrow' /li:ɣen/ 'to lie' (both
senses) /śla:ɣen/ 'to hit' /auɣe/ 'eye';

in consonantal clusters,

e.g. /ɣlik/ 'luck' /morɣen/ 'to-morrow',
'a land measure' /folɣen/ 'to follow'.

/k/ Velar voiceless stop. Tension is fortis, and the aspi-
ration is less obvious than with /p/ and /t/. The place
of articulation is the same as for /ɣ/, except for the
lack of voice, and increased tension. /k/ is common in
word-final position, like the other voiceless stops so
far dealt with--and unlike their voiced counterparts--
though with reduced tension after long vowels. Like
/p/, it is uncommon intervocalically after long vowels.[19]
Positional and random variants are as follows:

$$\left[\underset{\frown}{k^{\mathsf{c}}_{i}}\right] \left[\underset{\frown}{k^{\mathsf{c}}_{e}}\right] \left[\underset{\frown}{k^{\mathsf{c}}_{a}}\right] \left[\underset{\frown}{k^{\mathsf{c}}_{o}}\right] \left[\underset{\frown}{k^{\mathsf{c}}_{u}}\right]$$

[19]See general discussion under "Consonants" above, p. 29-30.

initially before vowels and semi-consonants,

e.g. /ki:l/ 'cool' /kint/ 'child' /ke:fer/ 'bug'

/kalp/ 'calf' /kotsen/ 'to vomit' /kurts/ 'short'

/ku:/ 'cow' /kni:/ 'knee' /kri:xen/ 'to crawl'

/kva:l/ 'torment';

$\begin{bmatrix} k_i^{\cdot} \end{bmatrix}$ etc. intervocalically after short vowels,

e.g. /riken/ 'back' /vikeln/ 'to wind'

/drekix/ 'dirty' /haken/ 'to cut' (bush)

/troken/ 'dry' /špuken/ 'to spit';

$\begin{bmatrix} k_a^{\cdot} \end{bmatrix}$ finally after long vowels,

e.g. /ha:k/ 'Haak' (family name).

Further occurrences for which a regular pattern of
length and tension could not be determined:

$\begin{bmatrix} k_a \end{bmatrix}$ $\begin{bmatrix} k_a^{\cdot} \end{bmatrix}$ $\begin{bmatrix} k_a^{\cdot} \end{bmatrix}$ etc.

intervocalically after long vowels,

e.g. /ha:ken/ 'hook' /špu:ken/ 'to haunt';

finally after short vowels,

e.g. /dik/ 'thick' /štik/ 'bit' /drek/ 'dirt'

/vek/ 'away' /γešmak/ 'taste' /štok/ 'stick'

/šluk/ 'mouthful';

in consonantal clusters,

/fuks/ 'fox' /zeks/ 'six' /nakt/ 'naked' /maske/
'mask' (only example) /le:xt/ '(he) lays'

/knakvurst/ 'a kind of sausage' /klauen/ 'to steal'

/virken/ 'to effect' /štark/ 'strong' /kalk/

'chalk' /šraŋk/ 'cupboard' /ɣiŋken/ '(they) went' /štiŋkt/ 'stinks'.

/v/ Labio-dental voiced fricative. Tension is lenis. It does not appear in word-final position, and is not common intervocalically after long vowels.[20] Distribution is as follows:

[β̌] initially before vowels,

e.g. /vi:/ 'how' /višen/ 'to wipe' /ve:x/ 'road' /ven/ 'if' /va:r/ 'true' /varm/ 'warm' /vo:/ 'where' /volke/ 'cloud' /vu:t/ 'anger' /vurtsel/ 'root' /vaip/ 'wife';

intervocalically after long vowels,

e.g. /le:ve/ 'lion' /me:ve/ 'sea-gull';

in consonantal clusters,

e.g. /kvetšen/ 'to squeeze' /švarts/ 'black' /tsvelf/ 'twelve'.

/f/ Labio-dental voiceless fricative. Tension is fortis. It is found in word-final position, unlike its voiced counterpart. It also occurs regularly after long as well as short vowels in the intervocalic position.[21] Positional and random variants are as follows:

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[20]See general discussion under "Consonants" above, p. 28.

[21]Ibidem.

$\left[\begin{smallmatrix} \emptyset \\ f \end{smallmatrix}\right]$ initially before vowels and semi-consonants,

e.g. /fi:r/'for', 'four' /fiš/ 'fish' /fe:der/ 'feather' /fet/ 'fat' /fa:ter/ 'father' /falen/ 'to fall' /fa:l/ 'stake' /fo:yel/ 'bird' /fol/ 'full' /fosten/ 'post' /fu:s/ 'foot' /furxt/ 'fear' /faier/ 'fire' /flaiš/ 'meat' /frixte/ 'fruits' /fau/ 'the letter "v"';

$\left[\begin{smallmatrix} \emptyset' \\ f \end{smallmatrix}\right]$ intervocalically after short vowels,

e.g. /šafen/ 'to work' /trefen/ 'to meet' /fefer/ 'pepper' /yetrófen/ 'met';

$\left[\begin{smallmatrix} \emptyset \\ f \end{smallmatrix}\right]$ finally after long vowels,

e.g. /ši:f/ 'crooked' /ša:f/ 'sheep' /ho:f/ 'yard', 'farm' /beru:f/ 'trade' /štaif/ 'stiff'.

Further occurrences for which a regular pattern of length and tension could not be determined:

$\left[\begin{smallmatrix} \emptyset \\ f \end{smallmatrix}\right]$ $\left[\begin{smallmatrix} \emptyset' \\ f \end{smallmatrix}\right]$ $\left[\begin{smallmatrix} \emptyset \\ f \end{smallmatrix}\right]$

intervocally after long vowels,

e.g. /šti:fel/ 'boot' /ke:fer/ 'bug' /šla:fen/ 'to sleep' /o:fen/ 'stove' /taufen/ 'to baptize';

finally after short vowels,

e.g. /šif/ 'ship' /štof/ 'material';

in consonantal clusters,

e.g. /šarf/ 'sharp' /šilf/ 'reeds' /friš/ 'fresh' /fropfen/ 'to graft' /apfel/ 'apple' /kampf/ 'struggle' /štrumpf/ 'stocking' /luft/ 'sky'

/zenf/ 'mustard'   /zanft/ 'soft'   /hanf/ 'hemp'
/štumpf/ 'dull'   /kopf/ 'head'.

/z/   Blade-alveolar voiced groove fricative. Voicing is
      light in the initial position. Lips are spread. Ten-
      sion is lenis. Positional or random variants are as
      follows:

$\left[\underset{\smile}{Z} \right]$ initially before vowels only,

~ $\left[\underset{\smile}{s\overset{\frown}{Z}} \right]$ e.g. /zi:s/ 'sweet/ /zitsen/ 'to sit'
      /ze:en/ 'to see' /zeks/ 'six' /za:t/ 'seed'
      /zant/ 'sand' /zo:/ 'so' /zone/ 'sun'
      /zu:xen/ 'to seek' /zupe/ 'soup' /zaugen/
      'to suck' /zail/ 'rope';
      intervocalically after long vowels only,
      e.g. /γemi:ze/ 'vegetables' /le:zen/ 'to read'
      /bla:zen/ 'to blow' /do:ze/ 'box' /blu:ze/
      'blouse' /laize/ 'lice', 'softly' /maize/ 'mice'
      /krauze/ 'curly';
      in consonantal clusters,
      e.g. /halze/ 'throat' (dat.) /bremze/ 'brake'
      /ferze/ 'heel'.

/s/   Blade alveolar voiceless groove fricative. Lips are
      spread. Tension is fortis, but the high "apparent
      sonority" is due to the nature of the sound itself
      rather than to any special tension; it is "fortis" in

comparison with /z/, if only because the tongue in
the groove position has to withstand extra breath
pressure due to voicelessness. Positional and random
variants are as follows:

[s̩˙] intervocalically after short vowels,

e.g. /kisen/ 'pillow', 'to kiss' /visen/
'to know' /esen/ 'to eat' /vaser/ 'water'
/drosel/ 'thrush' /ɣešlosen/ 'closed'
/ruse/ 'Russian';

[s̩] finally after long vowels,

e.g. /zi:s/ 'sweet' /di:s/ 'this' /ma:s/
'measure' /ɣro:s/ 'big' /fu:s/ 'foot' /ais/
'ice' /maus/ 'mouse'.

Further occurrences for which a regular pattern of
length and tension could not be determined:

[s̩] [s̩˙]

intervocalically after long vowels,

e.g. /ɣi:sen/ 'to pour' / ri:sen/ 'to greet'
/kle:se/ 'dumplings' /stra:se/ 'street'
/ɣro:se/ 'big' /šmaisen/ 'to throw' /drausen/
'outside';

finally after short vowels,

e.g. /ris/ 'tear' /ɣras/ 'grass' /ɣlas/ 'glass'
/das/ 'that' /nas/ 'wet' /kus/ 'kiss';

in consonantal clusters,

e.g. /tsa:n/ 'tooth' /zitsen/ 'to sit' /rexts/
'right' /herts/ 'heart /zalts/ 'salt' /tantsen/

'to dance'   /zeks/ 'six'   /fuxs/[22] 'fox'
/hans/ 'Hans' (name) /hals/ 'throat'   /vesten/
'west'   /aŋst/ 'fear'   /knospe/ 'bud'   /erpsen/
'peas'   /jetst/ 'now'   /tsvai/ 'two'   /artst/
'doctor'   /e:rst/ 'first'.

/š/   Frontal palato-alveolar groove fricative. Tension is
fortis. The groove is wider than for /s/, and its
"apparent sonority" is not as pronounced. It has no
voiced equivalent. It occurs initially before vowels,
before semi-consonants /l,r,m,n/ and the voiceless
fricative /v/, and before the voiceless stops /p,t/.
Examples are to be found mainly under "consonant clus-
ters" below. There are no examples of /š/ after long
vowels unless we regard diphthongs as such. Positional
and random variants are as follows:

$\begin{bmatrix} \v{s} \\ \ulcorner \end{bmatrix}$ initially before vowels and semi-consonants,
e.g. /ši:f/ 'crooked'   /šiŋken/ 'ham'   /še:re/
'scissors'   /šetsen/ 'to evaluate'   /ša:le/ 'shell'
/šafen/ 'to work'   /šo:n/ 'already'   /šu:/ 'shoe'
/šuster/ 'cobbler'   /šauen/ 'to look'   /šne:/
'snow';

$\begin{bmatrix} \v{s}\cdot \\ \ulcorner \end{bmatrix}$ intervocalically after short vowels,
e.g. /fišen/ 'to fish'   /lešen/ 'to lick'
/taše/ 'pocket'.

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[22]Alternative form: /fuks/.

Further occurrences for which a regular pattern of
length and tension could not be determined:

$\left[\underset{\sqcup}{\check{s}}\right]$ $\left[\underset{\sqcap}{\check{s}}\right]$

finally and intervocalically after diphthongs,

e.g.   /flaiš/ 'meat'   /flaišer/ 'butcher'

/raušen/ 'to murmur'

finally after short vowels,

e.g.   /fiš/ 'fish'   /raš/ 'quick'   /froš/ 'frog'

/buš/ 'bush' (Canadianism);

in consonant clusters,

e.g.   /kvetšen/ 'to pinch'   /ɟemišt/ 'mixed'

/špaixer/ 'barn'   /štu:l/ 'chair'   /šlau/ 'sly'

/šmaisen/ 'to throw'   /šraien/ 'to scream/

/švi:l/ 'sultry'   /menš/ 'man'   /marš/ 'march'.

/x/   Velar voiceless fricative, voiceless equivalent of /ɣ/.
It does not occur initially. Intervocalically, it is
more frequent after long vowels than after short ones.
Positional and random variants are as follows:

$\left[\underset{\frown}{\underset{i}{\mathrm{x}\colon}}\right]$ $\left[\underset{\frown}{\underset{e}{\mathrm{x}\colon}}\right]$ $\left[\underset{\frown}{\underset{a}{\mathrm{x}\colon}}\right]$ $\left[\underset{\frown}{\underset{o}{\mathrm{x}\colon}}\right]$ $\left[\underset{\cdot\cdot}{\underset{u}{\mathrm{x}\colon}}\right]$

intervocalically after short vowels,

e.g.   /kixern/ 'to giggle'   /brexen/ 'to break'

/laxen/ 'to laugh'   /koxen/ 'to cook';

finally after long vowels,

e.g.   /kri:x/ 'war'   /šte:x/ 'path'   /ta:x/ 'day'

/la:x/ 'lay'   /na:x/ 'after'   /flo:x/ 'flew'

/kru:x/ 'jug'.

Further occurrences for which a regular pattern of
length and tension could not be determined:

$$\left[X_{a} \right] \quad \left[X_{a} \right] \quad etc.$$

intervocalically after long vowels,

e.g.   /bi:xer/ 'books'   /kri:xen/ 'to creep'

/bra:xe/ 'fallow'   /zu:xen/ 'to seek';

finally after short vowels,

e.g.   /blex/ 'tin'   /dax/ 'roof'   /nox/ 'still' (adv.)

/bux/ 'book';

in consonantal clusters,

e.g.   /tixtix/ 'clever'   /jaxten/ 'to hunt'

/jauxtsen/ 'to rejoice'   /fuxs/ 'fox'   /fixse/
'foxes'   /strolx/ 'bum'   /menx/ 'monk'   /storx/
'stork'   /furxe/ 'furrow'   /tsaitunx/ 'newspaper'.

/l/   Blade-alveolar voiced lateral. The body of the tongue
is flat, and the timbre is that of a mid-central vowel.
It is a very stable sound rather influencing than being
influenced. It has no voiceless equivalent, and any
frictional noise which accompanies the voice is minimum.
Positional and random variants are as follows:

$\left[\mid \right]$ initially before vowels only,

e.g.   /li:t/ 'song'   /li:yen/ 'to lie' (both senses)

/liŋke/ 'left' /le:ber/ 'liver' /lefel/ 'spoon'
/la:den/ 'to load' /laxen/ 'to laugh' /laŋ/
'long' /lo:s/ 'loose' /lox/ 'hole' /luft/ 'sky',
'air' /laus/ 'louse';

intervocalically after short vowels,

e.g. /brile/ 'glasses' /filen/ 'to fill' /hele/
'hell', 'bright' /ale/ 'all' /tole/ 'mad'.

Further occurrences for which a regular pattern of
length and tension could not be determined:

$$\left[\; | \; \right] \quad \left[\; |\cdot \; \right]$$

intervocalically after long vowels,

e.g. /fi:len/ 'to feel' /špi:len/ 'to play'
/tse:len/ 'to count' /ša:le/ 'skin' /ho:len/
'to fetch' /šu:le/ 'school' /tailen/ 'to part'
/fauliye/ 'rotten';

finally after short vowels,

e.g. /štil/ 'still' /hel/ 'bright' /fal/ 'case'
/tol/ 'mad' /nul/ 'zero';

finally after long vowels,

e.g. /ki:l/ 'cool' /me:l/ 'meal' /šma:l/
'narrow' /ko:l/ 'cabbage' /štu:l/ 'chair' /tail/
'part' /faul/ 'lazy';

in consonantal clusters,

e.g. /kalt/ 'cold' /volke/ 'cloud' /šilf/ 'reeds'
/yelp/ 'yellow' /fals/ 'false' /hals/ 'throat'
/milx/ 'milk' /flaumen/ 'plum' /flantsen/ 'to plant'

/fliːyen/ 'to fly' /slaŋe/ 'snake' /plat/
'flat', 'low' /klain/ 'small' /ɣlat/ 'smooth'
/bluːt/ 'blood' /folye/ consequence' /helya/
'Helga' (name) /halze/ 'throat' (dat.).

/r/   Apico-alveolar voiced trill. It is usually pronounced
with considerable energy, and therefore seldom unrolled,
in stressed syllables. The actual trill may be preceded,
in the initial position, by a period of central voca-
lization, which serves as a preliminary to the produc-
tion of the trill. It is most prominent intervocalically
after short vowels, and least prominent finally after
long vowels. This would suggest a parallel with the
phenomenon of tension in the other consonants. It is
also very prominent in consonant clusters in which it
precedes voiceless consonants and follows short vowels,
e.g. /hart/, /birke/, and /durx/. Positional and random
variants are as follows:

$\lceil r \rceil$ initially before vowels only,
    e.g. /riːxen/ 'to smell' /riken/ 'back' (subst.)
    /reːyen/ 'rain' /rexts/ 'right' /raːm/ 'cream'
    /rate/ 'rat' /roːt/ 'red' /rolen/ 'to roll'
    /ruːe/ 'rest' /runt/ 'round' /raie/ 'row';

$\lceil r\cdot \rceil$ intervocalically after short vowels,
    e.g. /farer/ 'preacher' /šperen/ 'to bar'
    /kliren/ 'to rattle' /karen/ 'cart'.

Further occurrences for which a regular pattern of
length and tension could not be determined:

[r] [r·]

        intervocalically after long vowels,

        e.g. /špi:ren/ 'to feel' /be:re/ 'berry'

/ha:re/ 'hair' /ɣebó:ren/ 'born' /špuren/

'tracks' /fairix/ 'fiery' /traurix/ 'sad';

finally after short vowels,

        e.g. /ɣešir/ 'dishes';

finally after long vowels,

        e.g. /vi:r/ 'we' /ve:r/ 'who' /šta:r/

'starling' /o:r/ 'ear' /u:r/'watch';

in consonantal clusters,

        e.g. /hart/ 'hard' /ɣirtel/ 'belt' /birke/

'birch' /ferkel/ 'young pig' /šarf/ 'sharp'

/kirše/ 'cherry' /durx/ 'through' /furxe/

'furrow' /vurtsel/ 'root' /erpsen/ 'peas'

/triŋken/ 'to drink' /pra:len/ 'to boast'

/kratsen/ 'to scratch' /frau/ 'lady' /fropen/

'cork', 'stopper' /šraube/ 'screw' /šterben/

'to die' /darm/ 'gut' /e:rde/ 'earth'

/morɣen/ 'morrow' /brenen/ 'to burn' /dre:en/

to turn' /ɣra:ben/ 'to dig'.

/m/   Bilabial voiced nasal.   Positional and random variants
      are as follows:

[m]   initially before vowels only,

        e.g. /mi:ten/ 'to rent' /mit/ 'with' /me:bel/
        'furniture' /melken/ 'to milk' /ma:len/ 'to
        grind' /markt/ 'market' /mo:s/ 'jam' /most/
        'wine' /munt/ 'mouth' /maister/ 'master'
        /maul/ 'mouth';

[m·]   intervocalically after short vowels,

        e.g. /švimen/ 'to swim' /klemen/ 'to pinch'
        /flame/ 'flame' /komen/ 'to come' /krume/
        'crooked'.

Further occurrences for which a regular pattern of
length and tension could not be determined:

[m]   [m·]

        intervocalically after long vowels,
        e.g. /ri:men/ 'strap' /še:men/ 'to shame'
        /na:me/ 'name' /o:ma/ 'grannie' /blu:me/
        'flower' /baime/ 'trees';
        finally after short vowels,
        /šlim/ 'bad' /šlam/ 'slime' /kom/ 'come'
        /štum/ 'dumb';
        finally after long vowels,
        e.g. /i:m/ 'to him' /le:m/ 'clay' /tsa:m/
        'tame' /štro:m/ 'stream' /baum/ 'tree';

in consonantal clusters,

e.g. /amt/ 'public function' /hemt/ 'shirt'

/tsimft/ 'cinnamon' /štrimfe/ 'stockings'

/lumpix/ 'ragged' /amsel/ 'blackbird'

/àmsterdám/ 'the city' /krempfe/ 'cramps'

/šimpfen/ 'to scold' /šmeken/ 'to taste'

/bremze/ 'brake' /bombe/ 'bomb' /halm/ 'stalk'

/derme/ 'guts'.

/n/   Blade-alveolar voiced nasal. Positional and random
      variants are as follows:

[n]   initially before vowels,

       e.g. /ni:re/ 'kidney' /nixt/ 'not' /ne:bel/
       'mist' /nest/ 'nest' /na:ze/ 'nose' /naxt/
       'night' /no:t/ 'distress' /norden/ 'north'
       /nu:deln/ 'noodles' /nul/ 'zero' /nain/ 'no',
       'nine';

[n·]   intervocalically after short vowels,

       e.g. /drinen/ 'inside' /brenen/ 'to burn' /fane/
       'pan' /zone/ 'sun' /brunen/ 'well' (subst.).

Further occurrences for which a regular pattern of length
and tension could not be determined:

[n] [n·]
       intervocalically after long vowels,

       e.g. /bi:ne/ 'bee' /hi:ner/ 'hens' /je:ne/
       'that' /za:ne/ 'cream' /o:ne/ 'without'

/štaine/ 'stones'   /pozaune/ 'trumpet';

finally after short vowels,

e.g. /din/ 'thin' /bin/ 'am' /ven/ 'if'

/kan/ 'can' /špon/ '(saw-)dust';

finally after long vowels,

e.g. /tse:n/ 'ten' /tsa:n/ 'tooth' /mo:n/

'poppy' /persó:n/ 'person' /hu:n/ 'hen';

in consonantal clusters,

e.g. /ains/ 'one' /menš/ 'man' /menx/ 'monk'

/zenf/ 'mustard' /ente/ 'duck' /hunt/ 'dog'

/šneke/ 'snail' /knoxen/ 'bone' /kern/ 'kernel'

/ɣnade/ 'grace' /aiɣne/ 'own' (adj.) /binden/

'to bind' /tsinzen/ 'interest' /ernst/ 'earnest'.

/ŋ/   Velar voiced nasal. Does not occur in initial position,
      nor after long vowels.[23] Positional and random variants
      are as follows:

   [ŋ·]   intervocalically after short vowels only,

          e.g. /briŋen/ 'to bring' /ziŋen/ 'to sing' /eŋe/

          'narrow' /šlaŋe/ 'snake' /tsuŋe/ 'tongue';

   [ŋ·]   finally after short vowels,

          e.g. /riŋ/ 'ring' /štreŋ/ 'strict' /entláŋ/

          'along' /špruŋ/ 'spring', 'leap';

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[23]See general discussion under "Consonants" above, p. 29-30.

[ŋ]   in consonantal clusters,

       e.g. /triŋken/ 'to drink' /liŋks/ 'left'

       /stiŋkt/ 'stinks' /briŋst/ '(you) bring'

       /briŋt/ 'brings' /kliŋyeln/ 'to ring', 'tinkle'.

/h/   Voiceless glottal spirant - one of three methods of vowel onset, viz. clear, glottalized and aspirate.[24] The sound is sometimes referred to in English as the "h-onglide," since during its articulation the speech organs are invariably in position for the following vowel sound, the expulsion of breath being merely a preliminary to sounding the vowel. It occurs as follows:

    [I̥] [ɛ̣̊] [å̦] [ʌ̥] [ʊ̥] ,

    before stressed vowels only,

       e.g. /hi:r/ 'here' /hiŋken/ 'to limp'

       /he:ren/ 'to hear' /her/ 'gentleman' /ha:r/

       'hair' /halten/ 'to hold' /ho:bel/ 'plane'

       /hofen/ 'to hope' /hu:n/ 'hen' /hunt/ 'dog'

       /haut/ 'skin' /haite/ 'to-day' /behalten/

       'to keep' /yehalt/ 'contents'.

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[24]Alternative terms are: "weicher, harter, gehauchter Einsatz" – Dieth, p. 103 .

4. <u>Vowels in unstressed syllables.</u> It is impossible to be
sure of the exact quality of vowels in unstressed syllables
especially in connected discourse. The approximate values are
given in the following tables, from which it will appear that
they tend to retain their quality, although they lose their
length. The phonemic interpretation of unstressed $\left[\dot{E} \right]$, that
is to say $\left[\partial \right]$, or "shwa," as an allophone of /e/ is based on
the general centralization of front vowels in the dialect.[25]

/i/ $\left[\dot{I} \right]$ e.g. /miljo:n/ 'million' /ho:nix/ 'honey';

/e/ $\left[\dot{E} = \partial \right]$ e.g. /behalten/ 'to keep' /na:del/ 'needle';

/a/ $\left[\dot{a} \right]$ e.g. /ame:rika/ (the first "a")

/na:xbar/ 'neighbour';

/o/ $\left[\Omega \right]$ e.g. /voli:njen/ 'Volhynia'

/ki:lo/ 'kilogram';

/u/ $\left[\dot{U} \right]$ e.g. /tsurik/ 'back' /helmut/ (name).

_____

[25]The same interpretation can be made of standard German;
c.f. William G. Moulton, "Juncture in Modern Standard
German," <u>Language</u>, XXIII (1947) pp.217-218. He says,
"Since the contrast between unstressed [ɛ] and [ə] is
never meaningfully distinctive, we may analyze [ə] as
an allophone of unstressed /e/."

5. <u>Consonants in unstressed syllables.</u> The consonants which
appear in unstressed syllables in final position receive
special prominence.[26] Examples are as follows:

/n/ $\left[\begin{smallmatrix}\dot{\varepsilon}\\\eta\end{smallmatrix}\right]$ e.g. /ha:ben/ 'to have';

/l/ $\left[\begin{smallmatrix}\dot{\varepsilon}\\l\end{smallmatrix}\right]$ e.g. /ho:bel/ 'plane' (tool);

/r/ $\left[\begin{smallmatrix}\dot{\varepsilon}\\\jmath\end{smallmatrix}\right]$ e.g. /fa:ter/ 'father'

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[26]The syllabicity of the sonants /l, r, n/ in unstressed
syllables is regarded by Moulton as an allophone of
unstressed /e/ in standard German. We have all the more
reason to do so here, as their syllabicity is in doubt.

CHAPTER IV

CONCLUSION

A. FINDINGS

The main informant speaks a dialect which is common
to a small sample of former Volhynian colonists chosen at
random. Thus it can be affirmed that Volhynia had a dialect
of its own. The outstanding features of this dialect, as com-
pared with standard German, are its unusual articulation basis
and its velar voiced fricative.

1. Articulation Basis and "Entrundung." There is a complete
shift of vowel articulation towards the back. This lends a
peculiar quality to the back vowels. The front vowels are
centralized. This, together with the characteristic spread
position of the lips, makes it impossible to say what is
rounded and what is unrounded. The speakers themselves confuse
the two by giving hypercorrect rounded forms, which would be
spread in standard German, and also by confusing meanings of
words which are distinguished only by lip position in stan-
dard German. For instance, if "Tür" is pronounced in the usual
way and a meaning in English is requested from the informant,
it is likely that he will say: "It means 'animal'--but could
mean 'door' too!"

A special instance of this phenomenon is the collapse
of the [ɔɪ] and [aɪ] diphthongs, the latter having absorbed the
former; thus, /laite/ means either 'people' or '(I) lead'.

2. $[\gamma]$. The "g" of standard German is replaced in the dialect by the velar voiced fricative. An educated "auxiliary" informant[1] gave it as his opinion that this was one of the two chief characteristics of the Volhynian dialect--the other being "Entrundung." He called $[\gamma]$ the "soft g."

B. SUGGESTIONS FOR FURTHER STUDY

1. Relation to English studies.

a) Historical. Modern dialects may illustrate historical developments in other languages. In the Volhynian pronunciation of "Nagel" we have a living example of the halfway stage between English 'nail' and the High German pronunciation. So also, the prefix /γe/ of the past participle contains the palatalized form of the velar voiced fricative, i.e. it represents the historic English "y-."[2] More points of comparison might be found.

b) Dialect geography. Eastern Germany is considered as a colonial area which shows no profusion of regional dialects such as is found within Germany proper. In spite of the fact that settlers came from different parts of Germany, a levelling

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[1] The Rev. K. Korella, M.A. (Alberta).

[2] Stuart Robertson, The Development of Modern English (Englewood Cliffs, N.J., 1957), p. 81. mentions that O.E. $[\gamma]$ may have become $[\gamma j]$ and then $[j]$ before disappearing, but is not certain.

process[3] took place over a wide area. A comparison could therefore be made between the colonial German dialects of East Germany and the colonial English dialects of North America from the point of view of levelling.

2. Entrundung. The most striking feature is "Entrundung." This might be studied from the following points of view.

a) Articulation basis. "Entrundung" ought to mean "the unrounding of vowels previously rounded." Further research on this and similar dialects might reveal whether these ever could have been rounded at any stage in their history, in view of the articulation basis mentioned. "ü" is, historically, a "u" which has the lip position for "u" while the tongue has moved forward at the same height in anticipation of a succeeding palatal. The lip-position for "u" in Volhynian German is more spread than rounded. It is not likely that there ever was any rounding in the usual sense of the word.

b) i-umlaut--a special case of vowel harmony. In view of what has been said about the articulation basis of the Volhynian dialect, it still needs to be made clear what the precise connection is between "Entrundung" and "i-umlaut" of back vowels. In the writer's opinion, they are not opposites. Perhaps the extreme "i-umlaut" of "u", for example,

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[3]"Sprachausgleich" is discussed by Adolf Bach, Deutsche Mundartforschung (Heidelberg, 1950), p. 68.

would be complete assimilation of the back vowel to the
palatal, and this is precisely what we find in Volhynian.
Perhaps the "ü" of High German is an intermediate stage, and
Volhynian the complete stage of i-umlaut.

c) Geographical extent. Volhynia, and, no doubt,
the mother colony in Poland belong to the same dialect region
as East Prussia and the Baltic with regard to "Entrundung."
Jean Fourquet mentions it as one of the tasks of German dialec-
tology to plot the areas covered by this phenomenon.

d) The question could also be further pursued in
German literature, and especially Early New High German.
Kenneth Brooke in his An Introduction to Early New High German[4]
mentions the variant forms "gültig" and "giltig," "würt" and
"wirt." Ludwig Erich Schmitt has evidence of "derfer" in
1360 and "geheren" in 1378 in official use at the court of
Emperor Charles the Fourth.[5]

Many examples of "Entrundung" are to be found in
seventeenth century literature, of the North-East in parti-
cular: twenty-eight examples of rhymes dependent on "Entrun-
dung" appear in about forty pages of Klara Collitz, Selections

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[4]Kenneth Brooke, An Introduction to Early New High German
(Oxford, 1955), p. xliii.

[5]Ludwig Erich Schmitt, Die Deutsche Urkundensprache in der
Kanzlei Kaiser Karls IV (1346-1378) (Halle, 1936), p. 31.

from Classical German Literature. Martin Opitz, here represen-
ted, the law-giver of his day in matters of German prosody, is
not likely to have indulged habitually in impure rhymes.[6]

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[6]Klara Collitz, Selections from Classical German Literature
(Oxford, 1914).

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    1902.

APPENDIX A

KEY TO SYMBOLS USED

<u>Phonetic symbols</u>   <u>Examples</u>

< >	Tongue advanced, retracted	a< a>
∧ ∨	Tongue raised, lowered	a∧ a∨
'	Slight aspiration following stops	t'
•	Extra length	n•
/	Full stress	[yε̇hȧpt']
\	Half stress	[au̇fpȧs'n̩]
،	Consonant serving as syllable nucleus	[himl̩]
˘	Vowel, not serving as syllable nucleus	[ĭε̇tst']
∩ ⊔ ⊓	Fortis, lenis, half-lenis in consonants	[t⌣ɨ̈r] [lɨ̈b'n] [lɨ̈p]
> <	Increasing, decreasing diphthong-- refers to tension	[zε̂ε̂n]
↑	↓	Rising, level, falling terminal contours	See "Prosody"
• _	Centralization in vowels	[ȧ] [ɨ]
⌢ ⌣	Very close transition within the syllable	[t͡s] affricate [ai̯] diphthong
^ •	Advanced, retracted point of articulation (consonants)	[ṱ ḓ]
ᴺ	Nasal release	[aɪd'ⁿn]

<u>Note regarding phonemic transcriptions</u>

In phonemic transcriptions, type-writer symbols are used

as follows:

/i/ replaces $\left[\dot{ɨ}\right]$ /u/ replaces $\left[ʊ\right]$

/e/ replaces $\left[\dot{E}\right]$ /o/ replaces $\left[ᴧ\right]$

/a/ = lax $\left[\dot{a}\right]$

(:) replaces crescendo of height and tension in
increasing diphthongs e.g. $\left[b|\widehat{ʊ\upsilon}ţ\right]$.

unstressed /e/ replaces $\begin{cases} \left[\dot{E}\right], = \left[ə\right], \text{ when unstressed.} \\ \left[\dot{ɛ}\right], \quad \text{— including transition} \end{cases}$

to syllabic consonants in

unstressed syllables, e.g. $\left[\overset{ɛ}{ŋ}\right]$

$\left[\dot{æ}\right]$ of Bloch and Trager is the second element of the
increasing diphthong in /a:/

APPENDIX B

BASIC WORD LIST - 216 words

1.	all	à|·ɛ̇
2.	and	ŭn·t̪
3.	animals	t̪ĩɨ·r'ɛ̇
4.	ashes	å̇š·ɛ̇
5.	at	t̂s͡ʊ̃ʊ·
6.	back (person's)	r'ɪki̭ɛ̇n
7.	bad	šlɛ̇xḙt̪ʻ
8.	bark (of a tree)	ɹɪn·d̪ɛ̇
9.	because	ꞵå̇ɪ|
10.	belly	b̪å̇ʊxʋ
11.	berry	b̪ɛ̃ėr'ɛ̇
12.	bug	kḙɛ̃ėꞵɛr
13.	bird	ꞵ̭ɑoɣᵉ|
14.	to bite	b̪å̇ɪs·n̩
15.	black	šꞵå̇ɹt̂s
16.	blood	bl͡ʊ̃ʊt̪ʻ

<u>Note</u>. This word-list was used with a bilingual informant who gave the Volhynian-German equivalent in response to the English.

The phonetic transcription is based on Bloch and Trager, <u>Outline of Linguistic Analysis</u> (Baltimore, 1942). Stress in monosyllables is unmarked, being always primary in the mentioned form. Where disyllables consist of a syllable of primary stress, followed by an unstressed syllable, stress is not marked, this being the typical pattern. Elsewhere it is marked. Discrepancies in translation are marked with an asterisk.

17.	to blow (of wind)	bláʼḙ ǯʼn	
18.	bone	kʼn̥ɒx·ʼn	
* 19.	to breathe	áæt̃m̥n	áæt̃m
20.	to burn (intrans.)	br·Ɛn·ᵋn	
21.	child	kʼɪn·t·	
22.	cloud	βɒl·kɛ	
23.	cold (weather)	ḳà l·t·	
24.	to come	k̥ɒm·ᵋn	
24A	to cough	h̥ʋs·t·ᵋn	
25.	to count	t͡sĒ̃ḙ·l n	
26.	to cut	h̥·à ḳᵋ n	
27.	day (not night)	t͡áæ·X̣	
28.	to die	ṣ̌tÈ·r·ʰb̥n	
29.	to dig	χ̣r·áæ̃b̥ n	
30.	dirty	d·r·Ɛḳ·ɪx̣	
31.	dog	h̥ʋn·t·	
32.	to drink	tr·ɪŋ·k·ᵋn	
33.	dry	tr·n̥ ḳ·ᵋn	
34.	dull	ṣ̌tʋm·p·	

35.	dust	šťåʊpʻ
36.	ear	n͞oʻrᶟ
37.	earth (soil)	e͞ȅʻrᶾdɛ ∼ e͞ȅʻɛᵣdɛ
38.	to eat	ɛsʻn
39.	egg	åɪ
40.	eye	åʊɣɛ
41.	to fall	ɸålʻn
42.	far	βåɪtʻ
43.	fat (subst.)	ɸɛtʻ
44.	father	ɸåæʻtɛᵣ
45.	to fear	ɸʊrʻχᵢtʻ
46.	feather	ɸe͞eʻdɛᵣ
47.	few	åɪnɪɣɛ
48.	to fight	zɪχᵢ šlåæɣₐn
49.	fire	ɸåɪɛↄ
50.	fish	ɸɪšʻ
51.	five	ɸɪnʻɸ
52.	to float	šβɪmʻtʻ

53.	to flow	ø‖ī̆t'sⁿn
54.	flower	b‖ū̆u'mᵉn
55.	to fly	ø‖ī̆t'γᵢε
56.	fog	nε̄̆εβᵉ‖
57.	foot	øū̆u's
58.	four	øī̆t'εr'
59.	to freeze	ør'ī̆t'r'ᵉn
60.	to give	γₑε̄̆ε'bᵉη
61.	good	γᵤū̆u t'
62.	grass	γₐr'ā̆æ's ～ γᵤr'ā̆s'
63.	green	γₐr'ī̆t'n
64.	guts	dε̄̆ʳr'mε
65.	hair	hₐā̆æ'r'ε
66.	hand	hₐȧn·t'
67.	he	ε̄̆ε'ɹ
68.	head	hₐȧupt'
69.	to hear	hₑε̄̆ε r²η
70.	heart	hₑε̄̆ʳr²ťs
71.	heavy	šβε̄̆ε'ɹ

72.	here	hiɪ́iˑɹ
73.	to hit	šláæˑɣᵉn
74.	to hold	haˑáˑlˑtⁿn
75.	how	βɪ́ɪˑ
76.	to go hunting	jáχˑtⁿn
77.	husband	Éeˑémánˑ
78.	I	ɟ ɪ^χi
79.	ice	áɪsˑ
80.	if	βÉnˑ
81.	in	ɪnˑ
82.	to kill	tꭥ tˑšláǽɣᵉn
83.	to know (facts)	βɪsˑᵉn
84.	lake	zÉéˑ
85.	to laugh	láχˑᵉn
86.	leaf	bláˑtˑ
87.	left (hand)	lɪŋˑkɪɛ
88.	leg	báɪn
89.	to lie (on side)	lɪ́ˑtˑɣɪᵉn
90.	to live	lÉèbᵉn

91.	liver	lɛ̄ė·bɛ̇r′
92.	long	lȧŋ·ɛ̇
93.	louse	lȧ̆ᴜs
94.	man (human)	mȧn·
95.	many	mɛ̄ė·r′ɛ̇
96.	meat	Ø̸lȧɨš
97.	mother	mᴜt′ɛ̇ɹ
98.	mountain	γ̇ɛ̇ʌbɨr′γ̇ɛ̇
99.	mouth	mᴜn·t′
100.	name	nǡæmɛ̇
101.	narrow	šmȧl·
102.	near	ɪndɛ̇ᵣnɛ̄ė·ɛ̇
103.	neck	γ̇ɛnɨk̇·
104.	now	ɛ̆ɛ̇ t͡st′
105.	night	nȧxᵢt′
106.	nose	nǡæzɛ̇
107.	not	nɪxᵢt′
108.	old	ȧl·t′
109.	one	ȧɪn′s

110.	other	*a̓nˑdr̓ɛ*
111.	person	*pɛ̓ᵣsn͡oˑn*
112.	to play	*špɪ̄ˑl̓n*
113.	to pull	*t͡sɪ̄tˑɛn*
114.	to push	*šɪtˑb̓n*
115.	to rain	*rɛ̄̄eˑɣ̧ɛn*
116.	red	*r̓n͡oˑt̓*
117.	right (course)	—
118.	right (hand)	*r̓ɛ̄ᴧx̧ˑt͡s*
119.	river	*št r̓n͡oˑm*
120.	road	*št r̓ǽˑsɛ*
121.	root	*βur̓t͡s̓l*
122.	rope	*štr̓ɪk!̓*
123.	rotten	*ø̧ᶦr̓ø̧ǎʋlˑt̓*
124.	to rub	*r²a̓ɨb̓n*
125.	salt	*za̓lˑt͡s*
126.	sand	*za̓nˑt̓*
127.	to say	*za̓æɣ̧ɛn*
128.	to scratch	*kr̓ɒ t͡sɛn* (rounded ?)

129.   sea   m éē'ɛ̨ᵣ

130.   to see   z ɛ̄ē'ɛn

131.   seed   sz ȧæ t'

132.   to sew   n ɛ̄ē'ɛn

133.   sharp   š ȧr'ɸ̨

134.   short   k ʊ r²tś

135.   to sing   z ɪŋ'ᵋn̨

136.   to sit   z ɪtśn

137.   skin   h ȧ ʊ t'

138.   sky   l ʊ ɸ̨'t' ∿ ɪn·dɪh ɛ̄ē'ɛ

139.   to sleep   š l ȧæ ɸ̨ n

140.   small   k l ȧ ɪn'

141.   to smell   r'ɪ̄t· χᵋn

142.   smoke (of fire)   ɟ ȧ ʊ χ n̨ᵋ

143.   smooth   γ. l ȧ t·'

144.   snake   š l ȧ ŋ'ɛ

145.   snow   š n ɛ̄ē

146.   some   ȧ ɪ n·ɪy ɛ́

147.   to spit   š p ʊ k̨n̨'

148. to split   špal·ľᴺn

149. to squeeze   kβɛ̇tš̃ᵋn

150. to stab   štɛ̇x·ᴺn

151. to stand   štr̃ɛ̇ɛn

152. star   štɛ̇ˇr'n

153. stick   štⱱk·ᶜ

154. stone   štȧɪn

155. straight   ɣɪˬr'ȧæ̃dɛ́

156. to suck   zȧυɣᵋn

157. sun   zⱱn·ɛ́

158. to swell   ȧυsdɛ̃ɛ̇·nᵋn

159. to swim   šβɪm·ᵋn

160. tail   øυsštɛ̃ɛx̣

161. that   dȧs'

162. there   dⱱr'ṭᶜ

163. they   jɛ̃ɛnɛ

164. thick   dɪk·ᶜ

165. thin   dɪn·

166. to think   dɛ̇ŋ·kᵋn

167.	this	dɪt's
168.	thou	d'ūʋ'
169.	three	dr'äɪ
170.	to throw	šmäɪsᵉn
171.	to tie	bɪn·dᴺn
172.	to-day	häɪtɛ
172A	tongue	tsʋŋ·ɛ
173.	tooth	tsäæ·n
174.	tree	bàʋm
175.	to turn	dr'ɛ̄e·ɛn
176.	two	tsβäɪ
177.	to vomit	kʌtsᵉn
178.	to walk	γɛ̄e·ɛn
179.	warm (weather)	βàr'm
180.	wash	βàš'n
181.	to water	—
182.	we	βɪ̄t·r²
183.	wet	nàs'
184.	what?	βàs'

185.	when?	β̇ɛn·
186.	where?	βn͡o
187.	white	βáɪs
188.	who?	βɛ́ė·ɛ́r'
189.	wide	brȧɪt·ʿ
190.	wife	βȧɪp·ʿ
191.	wind	βɪn·t·ʿ
192.	to wind	βɪkɛ́ǀn
193.	to wipe	βɪš̌·ɛ́n
194.	with (accompan	mɪt·ʿ
195.	woman	ǫr'ȧʊ
196.	woods	bȧɪmɛ́
197.	worm	βʊr'm
198.	ye (you)	ī̇t·r²
199.	year	jáæ̇ɹ
200.	yellow	ɣ̇ɛ́ǀ·p·ʿ
201.	brother	br'v͡ʊḋɛr ^d́ɹ
202.	sister	š̌βɛ́s·t·ɛ́ɹ
203.	six	zɛ́k·s

204.	seven	sᶻɪt̪b̪n̩
205.	eight	ax̣ˑt̪ˤ
206.	nine	náɪn
207.	ten	t̪s ɛ́eˑn̩
208.	twenty	t̪s̪β̌àn·t̪s̪ ɪx̣ˑ
209.	hundred	hʊn·d̪ɛ́ᵣt̪ˤ
210.	clothing	k̪ˡláɪd̪ʊŋ·k̪ˤ
211.	to cook	k̪ʌx̣ˑɛ́n̩
212.	to dance	t̪án·t̪s̪ɛn̩
213.	to shoot	š ɪ́ɪ·sᴺn̩
214.	to speak	šp̪r'ɛ́x̣ˑᴺn̩
215.	to work	áɹb̪àɪt̪ᴺn̩
216.	to cry	šr·áɪɛ́n̩

"Bear Story"
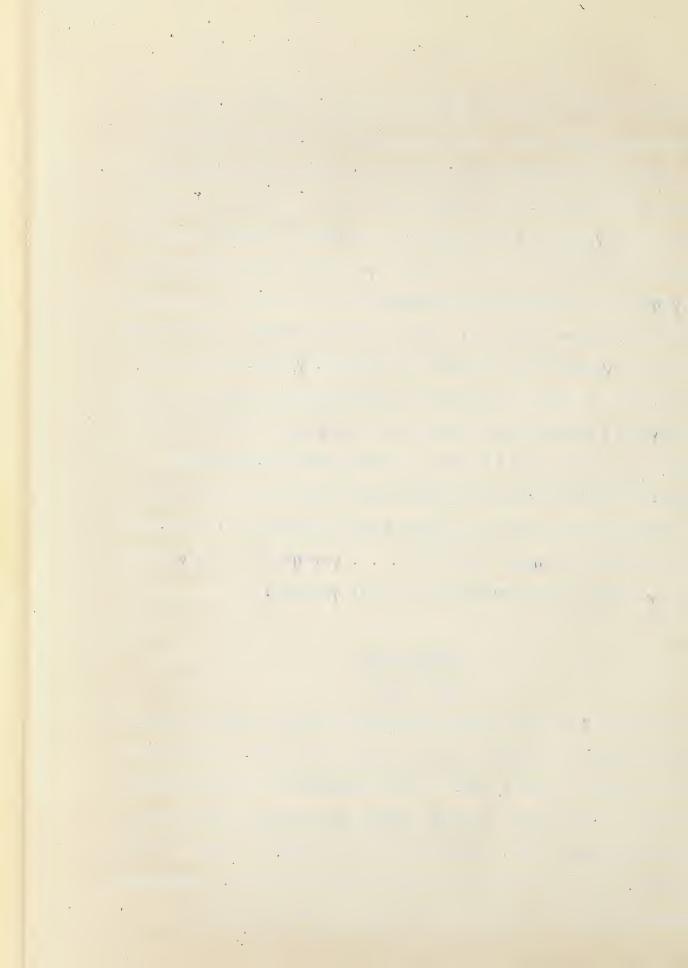
Example of connected discourse in phonemic transcription.

vir zint γeγaŋen aine ku: zu:xen| ix unt main man|
unt unzer aine zo:n| dan hap ix γehe:rt etvas knastern im
valt↓ unt dan hap ix γeza:xt| vali bist du: das↑ ist ni:mant
nixt γemelt| hap ix vi:der γeru:fen vali bist du: das↑ ka:m
imer ne:er imer ne:er| ja: es va:r šo:n zo šumer| unt den
mit ainma:l den hap ix γeze:en| komen ain be:r↓ aber ix va:r
filaixt zaine drai šrit ap↓ unt dan hat er zix zo ap gesukelt|
unt den ix bin zo: šte:enγebli:ben| er hat mi:r anγešaut
ix hap i:m anγešaut| unt dan hat er zix vi:der noxma:l zo
apγešukelt| unt dan hat er zix aufγeštelt| auf di hinterfi:s|
unt dan hat er zix hinγezetst| unt hat mir anγešaut↓ unt den
bin ix tsuzamenγezuŋken| auf maine kni:| unt bin hinγefalen↓
hap ix aine vail γele:γen| unt dan bin ix vi:der aufγeštanden|
bin ix ja nu:r tsvai šrit γeγanen| bin ix vi:der tsuzamenγe-
zuŋken↓ konte vaiter nixt γe:en↓ unt dan hap ix tsu γot γe-
zaiftst| γot zole dox main man unt main kint beva:ren↓ ven
ix aber aux tsum opfer šon bin| aber er zol dox di: beva:ren↓
das di zixer haim komen↓ dan bin ix vi:der aufγestanden| bin
vi:der ain stikxjen γeγaŋen| unt hap tsu γot γezaiftst| unt
dan| hap ix vi:der maine štim γekri:xt tsurik| unt dan hap ix
γeru:fen zi zolen nixt di:zen ve:x komen| vo ix bin γeγaŋen
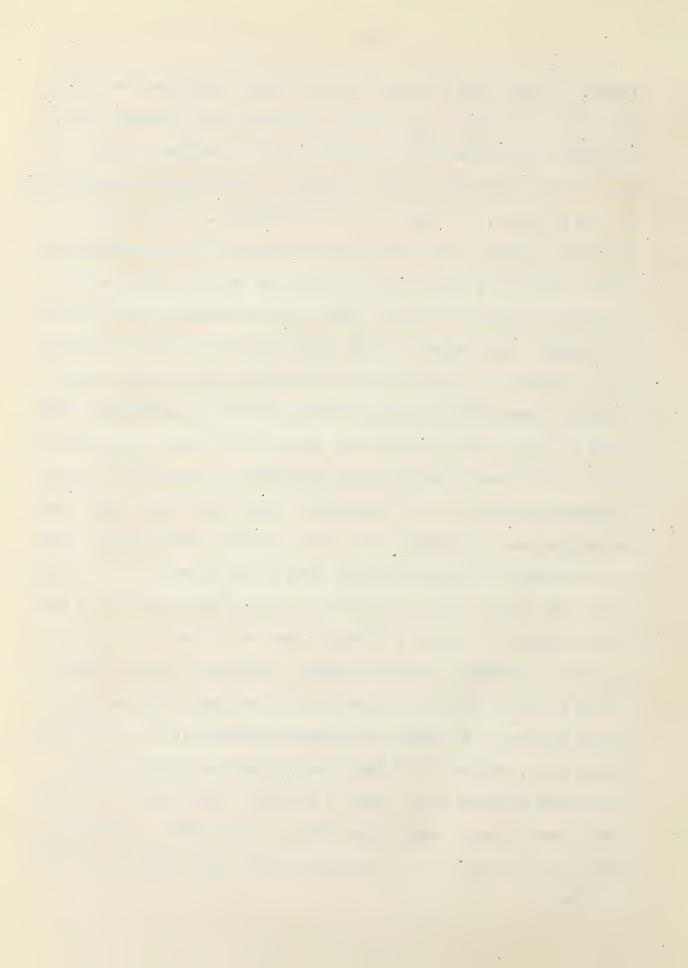zi zolen| štraks | γra:de haim γe:en↓ unt der be:r hat imer

ɣezesen unt hat mir aufɣepast| vi ix mir da: hap benomen↓
unt da ka:m tsu main zin ix zolt maine le:derjak aptsi:en↓
ix hap aine le:derjak anɣehapt| unt ix volt den ziper auf-
maxen| unt dan va:r der ziper auf| aber ix hap di le:derjak
nixt unterɣekri:xt↓ unt dan hap ix anɣehat| kalošen| unt di:
hap ix ferlo:ren| aber ix vust es ɣa:r nixt↓ unt dan bin ix
ɣeɣaŋen| o: filaixt zain finftsen šrit fom be:r ap| unt dan
va:r ix an aine fens| vi: za:xt man | aine tsaun| unt dan hap
ix mir anɣefast| unt dan hap ix aber zo: ɣešri:en unt zo:
ɣeru:fen| zi zolen ja: nixt hi:r komen di:zen ve:x zi zolen
haimɣe:en↓ unt das der naxbar mi:r hat ɣehe:rt das var vol
aine halbe mail nixt↑ berait nox me:r↓ unt de:r hat mir
ɣehe:rt unt hat mir an di štim erkant das ix es va:r↓ aber
er vust ja nixt das ix in zolxe ɣefa:r daunten va:r↓ na: zo:|
bin ix dox zo laŋzam in di he: . . . ɣeɣaŋen|unt bin ɣliklix
haimɣekomen| der be:r hat mir in ru: ɣelasen↓.

Translation

Bear Story

We went to look for a cow, my husband and I, and our only son,
then I heard something crackle among the trees. And then I
said, Wally, is that you? No one answered, I called again,
Wally, is that you? It came nearer and nearer, yes it was
already rather dark, and then all of a sudden I saw, a bear
coming. But I was perhaps about three paces off. And then he
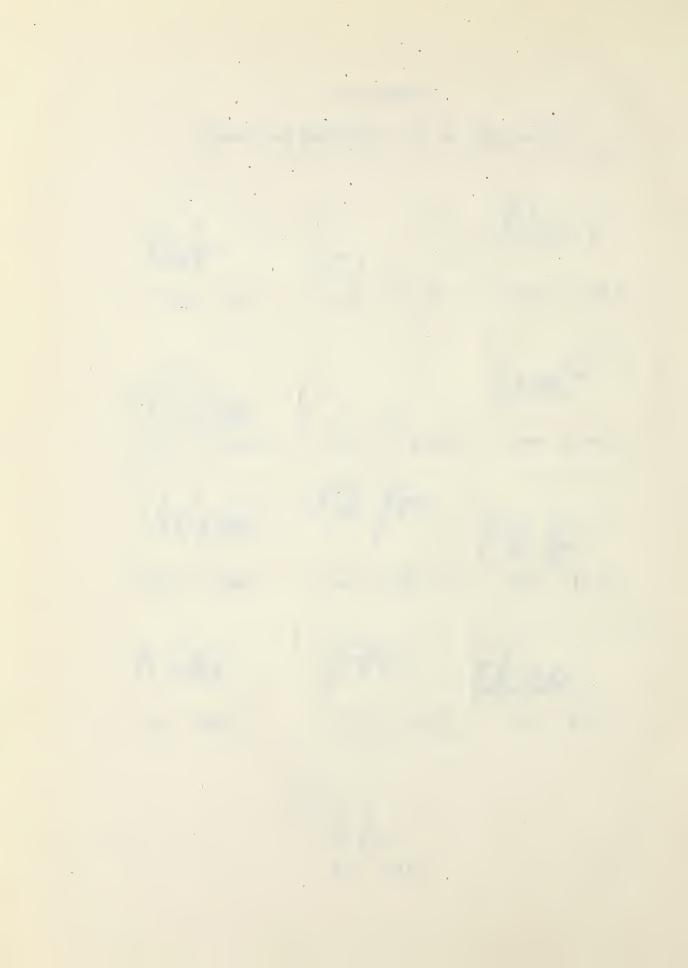shook himself, and then I stood still, he looked at me, I

looked at him, then he shook himself again, and then he stood
up, on his hind feet, and then he sat down, and looked at me.
And then I sank down, on my knees, and fell on the ground. I
lay a while, and then I got up again, I only went two steps, and
collapsed again. I could not go any further. And then I
breathed a prayer, that God should preserve my husband and my
child. Even if I was to be a victim, He should preserve them.
So that they get home safe. Then I got up again, went a little
bit further, and prayed to God, and then, I got my voice back
again, and then I yelled that they should not come this way,
the way I came, they should go straight home. And the bear sat
there all the time, watching me, what I was doing. And then it
came into my head I should take my leather jacket off. I had
a leather jacket on, and I wanted to undo the zipper, and then
the zipper was unfastened, but I did not get the leather jacket
off. And then I had rubbers on, and I lost them, but I did not
know. And then I went, oh perhaps fifteen paces away from the
bear, and then I was at a "fence", how do you say? a fence,
and then I gathered myself together, and then I shouted and
yelled so loud, that they should not come here this way they
should go home. So that the neighbour heard me, that would be
half a mile, wouldn't it? Maybe more. And he heard me and
recognized from my voice that it was me. But he did not know
that I was in such danger down there. Well then, I gradually
went up the hill(?) . . ., and got safely home, the bear left
me alone.

APPENDIX D

PHOTOGRAPHS OF LIP POSITIONS FOR VOWELS

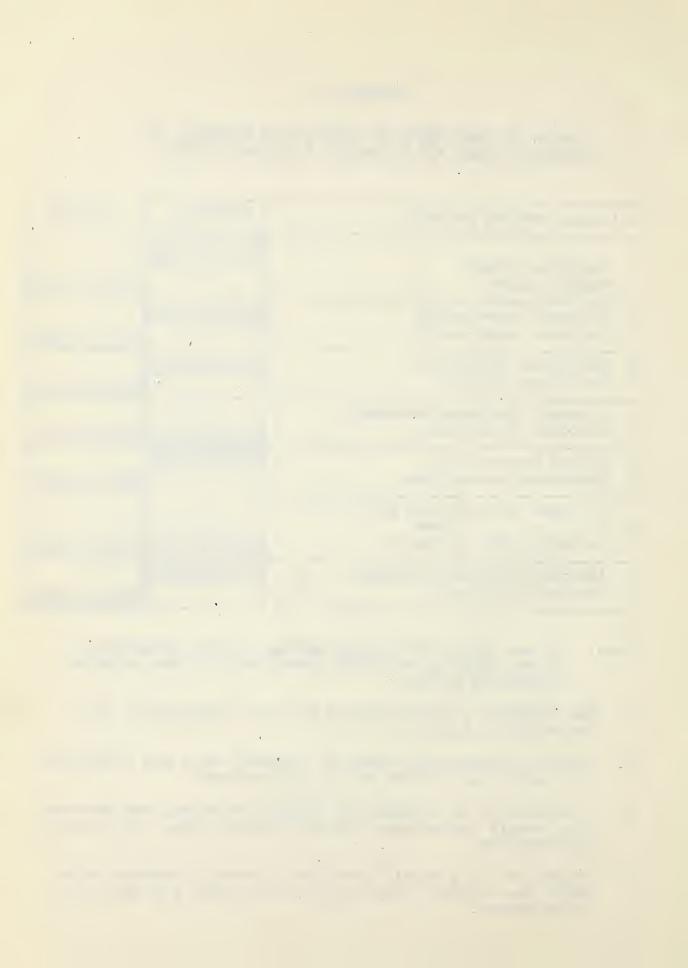/ blu:t / 'blood'   /fi:r/ 'Four'   "Tür" 'door'

/ unt / 'and'   /kint/ 'child'   "Rücken" 'back'

/ ro:t / 'red'   /ke:fer/ 'bug'   "hören" 'to hear'

/ štok / 'stick'   /fet/ 'fat'   "Hölle" 'hell'

/ale/ 'all'

APPENDIX E

A TABLE OF COMPARISON OF CANADA AND VOLHYNIA AS
SUITABLE AREAS FOR COLONIES OF GERMAN CULTURE

Critical factors paired	VOLHYNIA	CANADA
1 Daughter colony Mother colony	▨	▨
2 Cultural superiority Cultural inferiority	▨	▨
3 Religious difference Religious identity	▨	▨
4 Literary language possessed, borrowed from hosts	▨	▨
5 Closed communities Scattered communities	▨	▨
6 In touch with centres of home Isolated from culture	▨	▨
7 Adverse political pressure Complete tolerance	▨	▨

Note: In each pair, the factor making for the conservation
       of the original cultural inheritance of the colonist
       is printed on top.

1. The daughter colony tends to be more conservative than
    the mother colony.

2. Cultural superiority makes it unlikely that the colonists
    will adopt the culture of the environment.

3. A difference of religion as between colonists and surroun-
    ding people discourages cultural intercourse, and favours
    conservatism.

4. Possession of a highly developed literary language main-
    tains the cultural link with the home-land and makes for
    independence.

5. Closed communities make for group solidarity.

6. An open line of communication with the home-land allows free exchange of ideas and goods.

7. Political pressure tends to increase resistance.

Note: the factors here examined, but not the table, are taken from Lutz Mackensen, "Heimat Kolonie und Umvolk," Folk, I, 1937, where they are discussed with reference to German "Sprachinsel."

APPENDIX F

QUESTIONNAIRE USED WITH INFORMANTS

Name: . . . .

Geburtsort: . . . .

               (Kreis, Bezirk, Gemeinde)

Geburtsdatum: . . . .

Jahr der Auswanderung aus Wolhynien:. . . . .

Grund für die Auswanderung aus Wolhynien: . . . . . .

. . . .

Wurden andere Länder in Erwägung gezogen? . . . .

Welche? . . . .

Geburtsort des Vaters:. . . . . . .   Muttersprache: . . . . .

Geburtsort der Mutter:. . . . . . .   Muttersprache: . . . . .

Geburtsort der Frau:. . . . .   Muttersprache: . . . . .

<u>Schuljahre in Wolhynien:</u>
a) Unterricht in deutscher Sprache: . . . .

b) andere Sprachen (gesetzlich) gelernt . . . .

Schuljahre ausserhalb Wolhyniens: . . . .

Kinder: . . . .   Alter: . . . .

                             Geburtsort:. . . . .

                             Sprachen:. . . . .

Konfession: . . . .

Welche Staatsangehörigkeit(en) haben Sie offiziell vor der
Auswanderung besessen? . . . .

Note: Information thus gathered was used in Chapters I and II.